

# RAILS ACROSS AMERICA



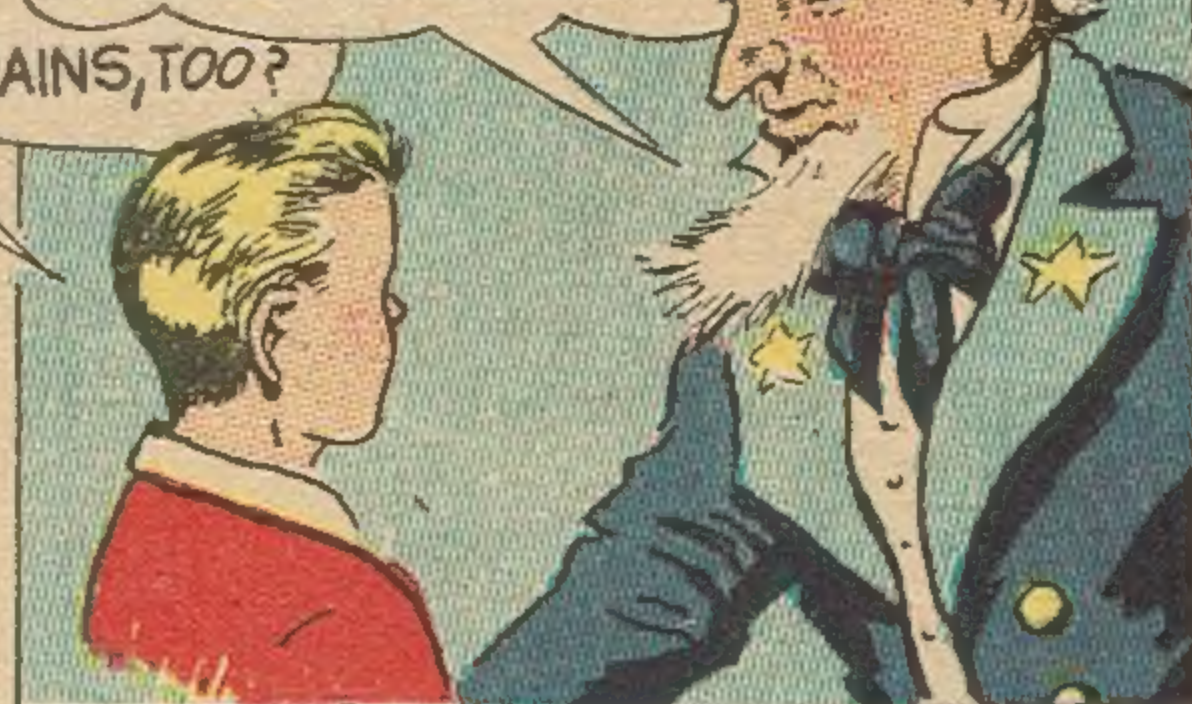


FROM THE EDGE OF A FIELD ON HIS FATHER'S FARM, JIMMIE WILSON WATCHES A BIG NEW STREAMLINED TRAIN SPEED BY. AS HE TURNS AROUND...



OH! I DIDN'T SEE YOU STANDING THERE. I'M JIMMIE WILSON. SAY, YOU LOOK LIKE UNCLE SAM! HAVE YOU BEEN WATCHING THE TRAINS, TOO?

SURE, I'M UNCLE SAM. AND, I'M INTERESTED IN TRAINS JUST AS YOU ARE. YOU MIGHT SAY THE RAILROADS AND I GREW UP TOGETHER. WE'RE BOTH OVER A HUNDRED YEARS OLD.



GEE! YOU MUST REMEMBER THE FIRST ENGINES. TELL ME ABOUT THEM, WILL YOU? IT WILL HELP ME WITH MY HISTORY.



RAILROADS MADE HISTORY, JIMMIE. THE IRON HORSE PUSHED THE FRONTIER TO THE PACIFIC - AND I'LL TELL YOU HOW HE DID IT. IT ALL STARTED THIS WAY...

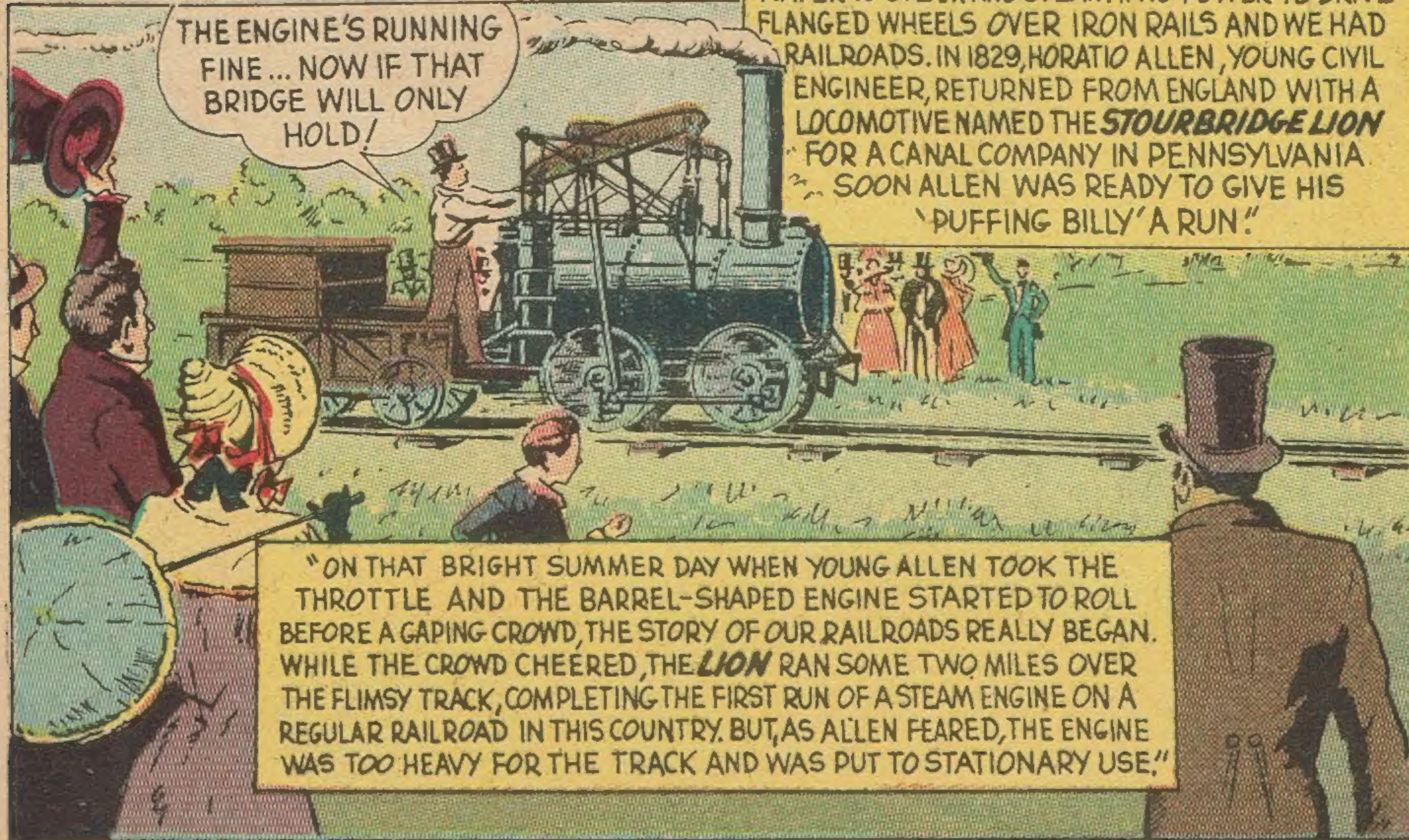


I THINK THIS ENGINE IS TOO HEAVY FOR OUR TRACK, BUT I'M GOING TO TRY IT, ANYWAY.



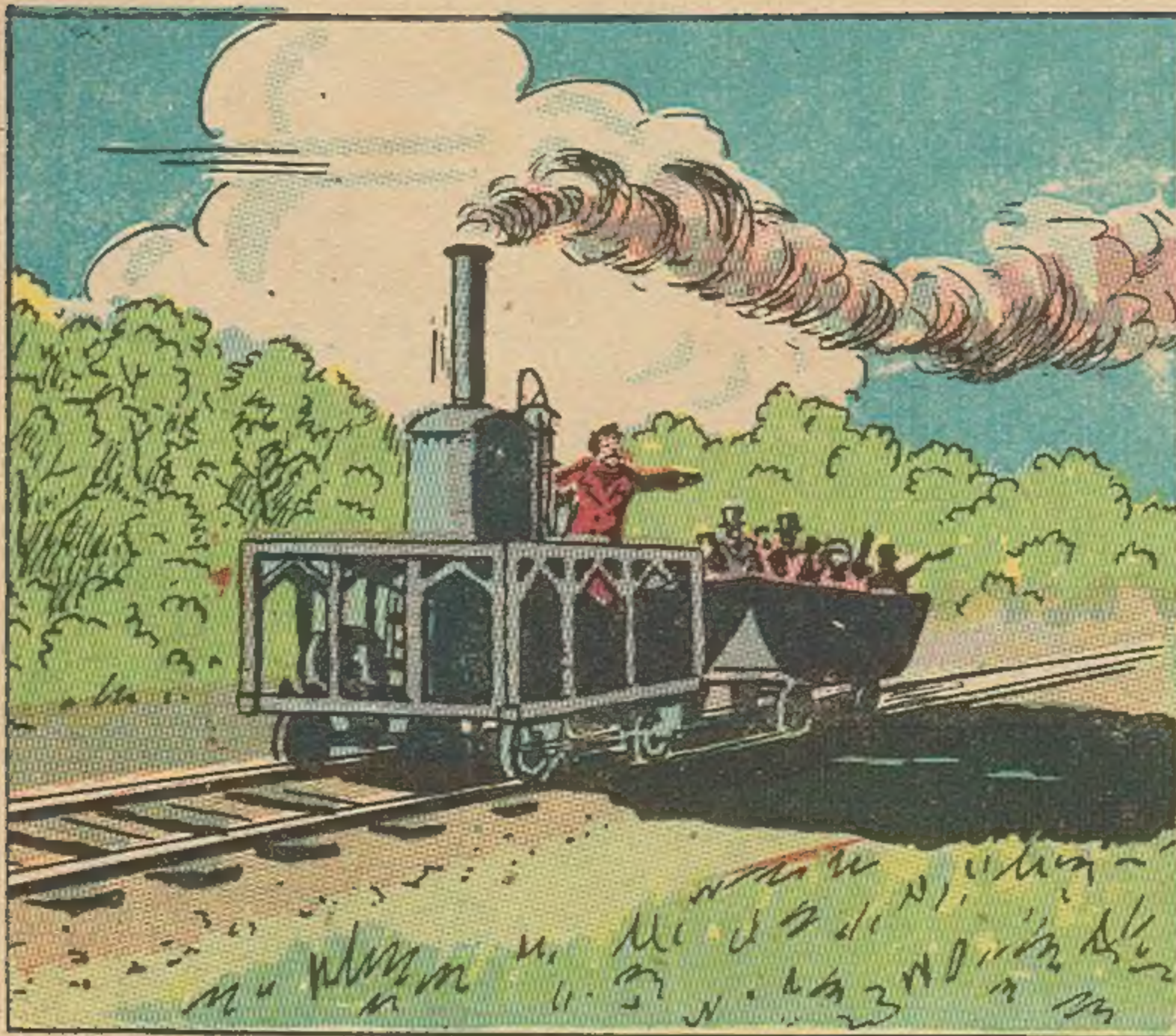
"BACK IN 1829, WHEN I WAS A YOUNG FELLOW, WE ALREADY HAD 'ROADS OF RAILS.' THEN CAME THE STEAM ENGINE WITH A RED-HOT FIRE BOX TURNING WATER TO STEAM AND STEAM INTO POWER TO DRIVE FLANGED WHEELS OVER IRON RAILS AND WE HAD RAILROADS. IN 1829, HORATIO ALLEN, YOUNG CIVIL ENGINEER, RETURNED FROM ENGLAND WITH A LOCOMOTIVE NAMED THE **STOURBRIDGE LION** FOR A CANAL COMPANY IN PENNSYLVANIA. SOON ALLEN WAS READY TO GIVE HIS 'PUFFING BILLY' A RUN."

THE ENGINE'S RUNNING FINE... NOW IF THAT BRIDGE WILL ONLY HOLD!



"ON THAT BRIGHT SUMMER DAY WHEN YOUNG ALLEN TOOK THE THROTTLE AND THE BARREL-SHAPED ENGINE STARTED TO ROLL BEFORE A GAPIING CROWD, THE STORY OF OUR RAILROADS REALLY BEGAN. WHILE THE CROWD CHEERED, THE **LION** RAN SOME TWO MILES OVER THE FLIMSY TRACK, COMPLETING THE FIRST RUN OF A STEAM ENGINE ON A REGULAR RAILROAD IN THIS COUNTRY. BUT, AS ALLEN FEARED, THE ENGINE WAS TOO HEAVY FOR THE TRACK AND WAS PUT TO STATIONARY USE."

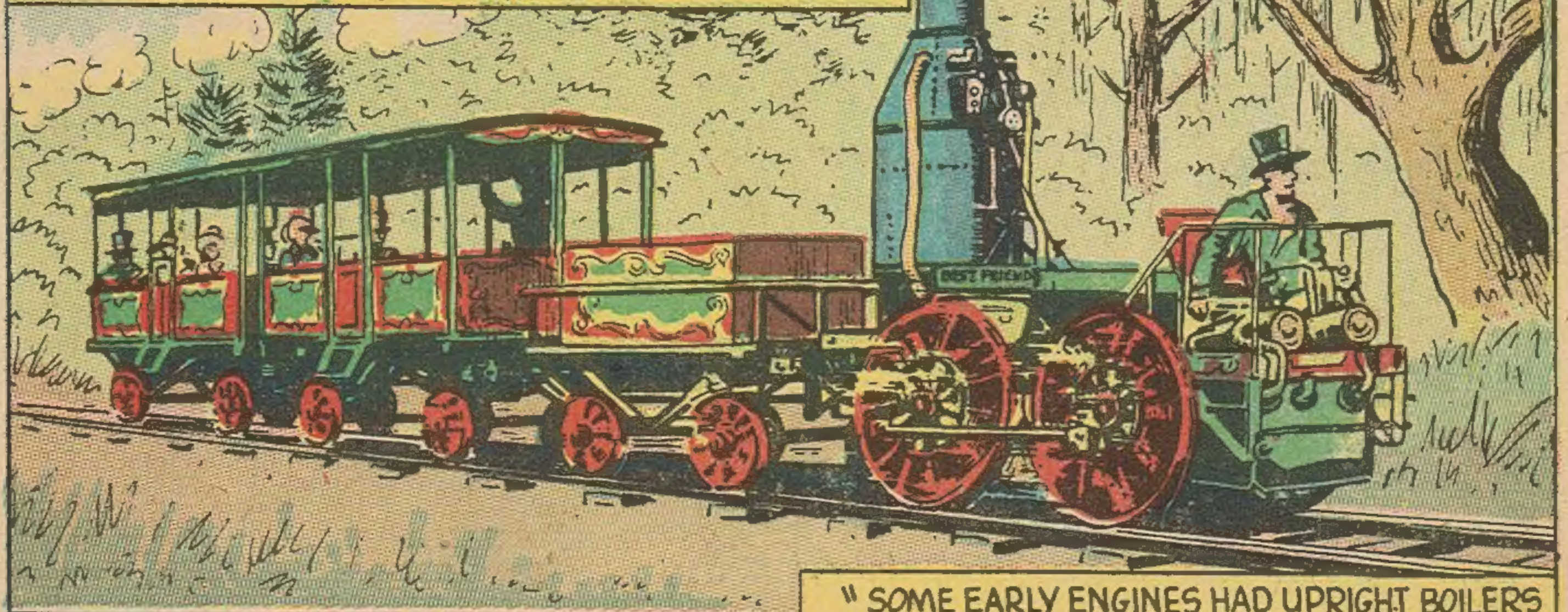




"NEXT LOCOMOTIVE TO ROLL OVER OUR TRACK WAS THE **LITTLE TOM THUMB**, BUILT BY PETER COOPER OF NEW YORK. THIS PINT-SIZED ENGINE WEIGHED ONLY ABOUT ONE TON, BUT IT HAD A LOT OF GET UP AND GO! WHEN IT MADE A TRIAL RUN IN AUGUST, 1830, OVER A NEWLY BUILT TRACK NEAR BALTIMORE, IT BECAME THE FIRST AMERICAN-BUILT LOCOMOTIVE TO RUN ON A COMMON CARRIER RAILROAD IN THE UNITED STATES.

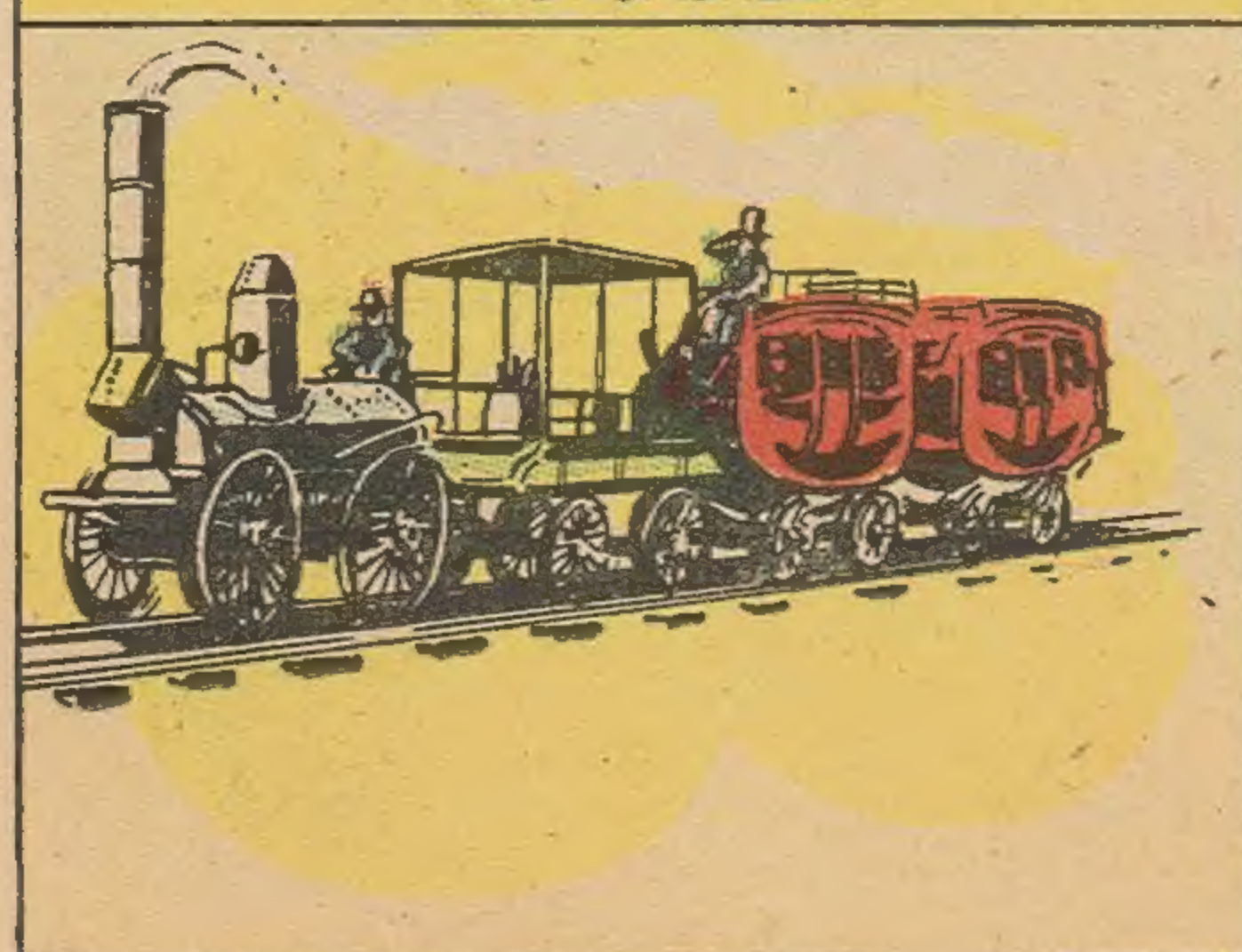
MEANWHILE, HORATIO ALLEN WAS HELPING TO START A RAILROAD IN SOUTH CAROLINA. ON DECEMBER 25, 1830, THAT LINE BECAME THE FIRST RAILROAD IN AMERICA TO USE STEAM POWER IN REGULAR SERVICE...

...WHEN THE LOCOMOTIVE **BEST FRIEND** OF CHARLESTON PULLED OUR FIRST TRAIN OF CARS OVER THE RAILS. A YEAR LATER, THIS RAILROAD BEGAN CARRYING U.S. MAIL!"



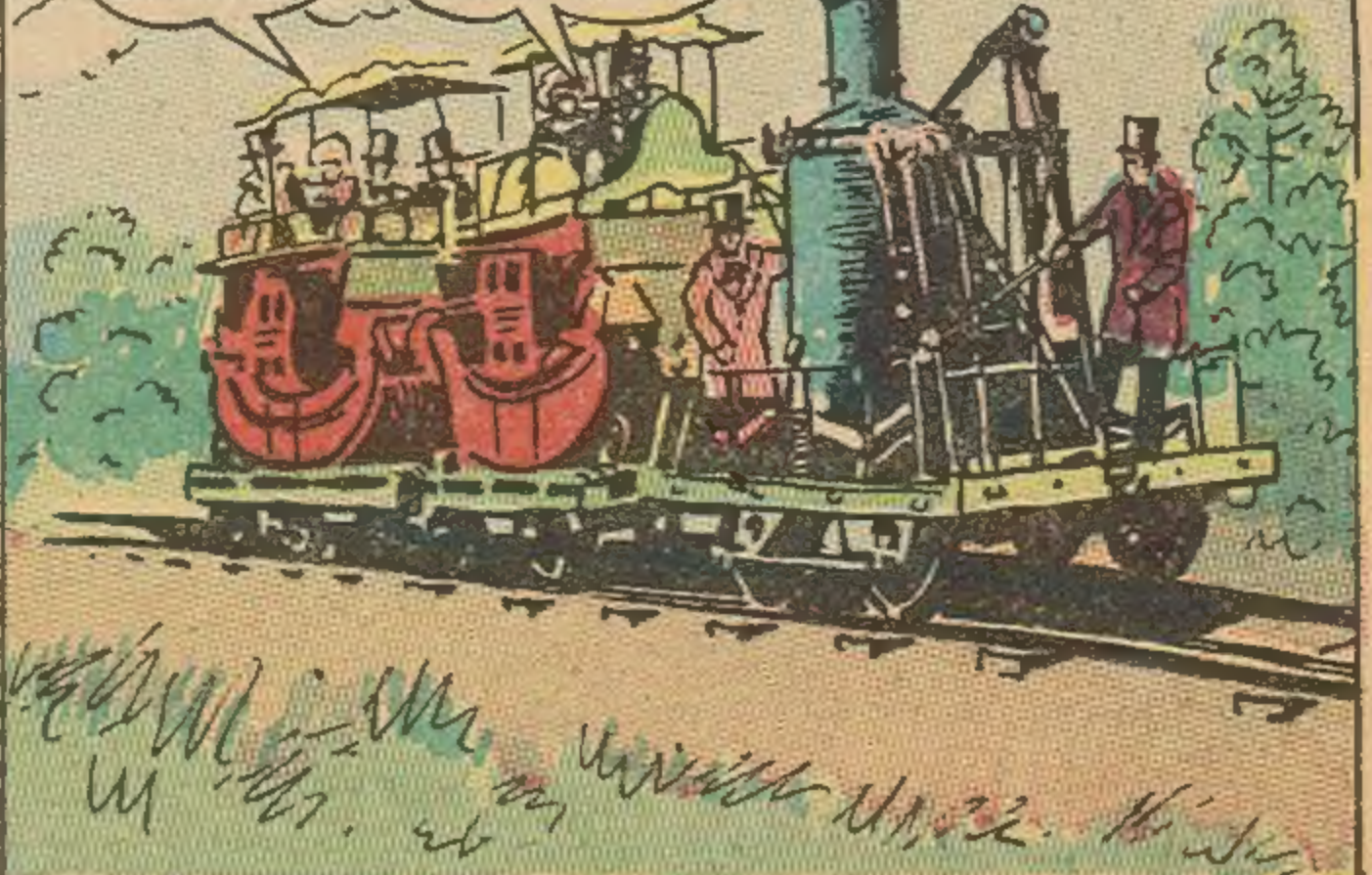
"SOME EARLY ENGINES HAD UPRIGHT BOILERS AND WERE NICKNAMED **GRASSHOPPERS**. PHINEAS DAVIS OF YORK, PA., BUILT SEVERAL OF THIS TYPE."

"IN 1831, THE FIRST STEAM TRAIN IN NEW YORK STATE WAS PULLED BY THE LOCOMOTIVE **DEWITT CLINTON**. THE CARS LOOKED LIKE STAGE COACHES."



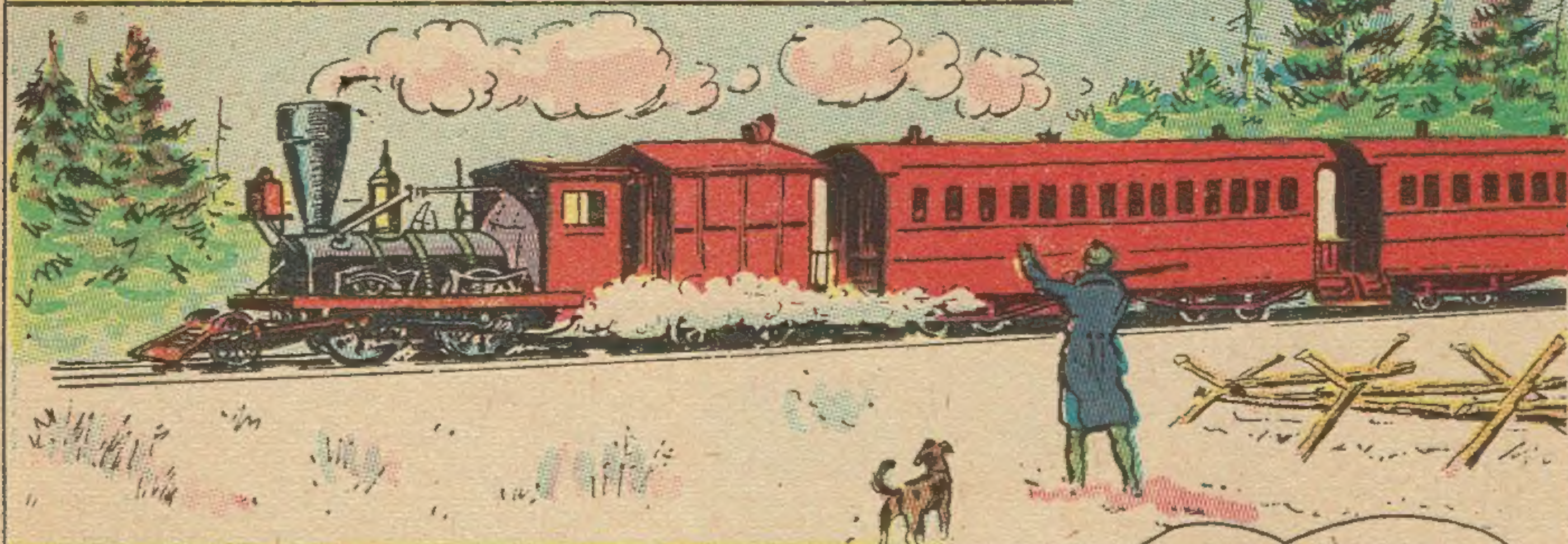
HANG ON! WE'RE GOING AROUND A CURVE!

OH, DEAR, I'M AFRAID THE SPARKS'LL SET FIRE TO MY NEW HAT.

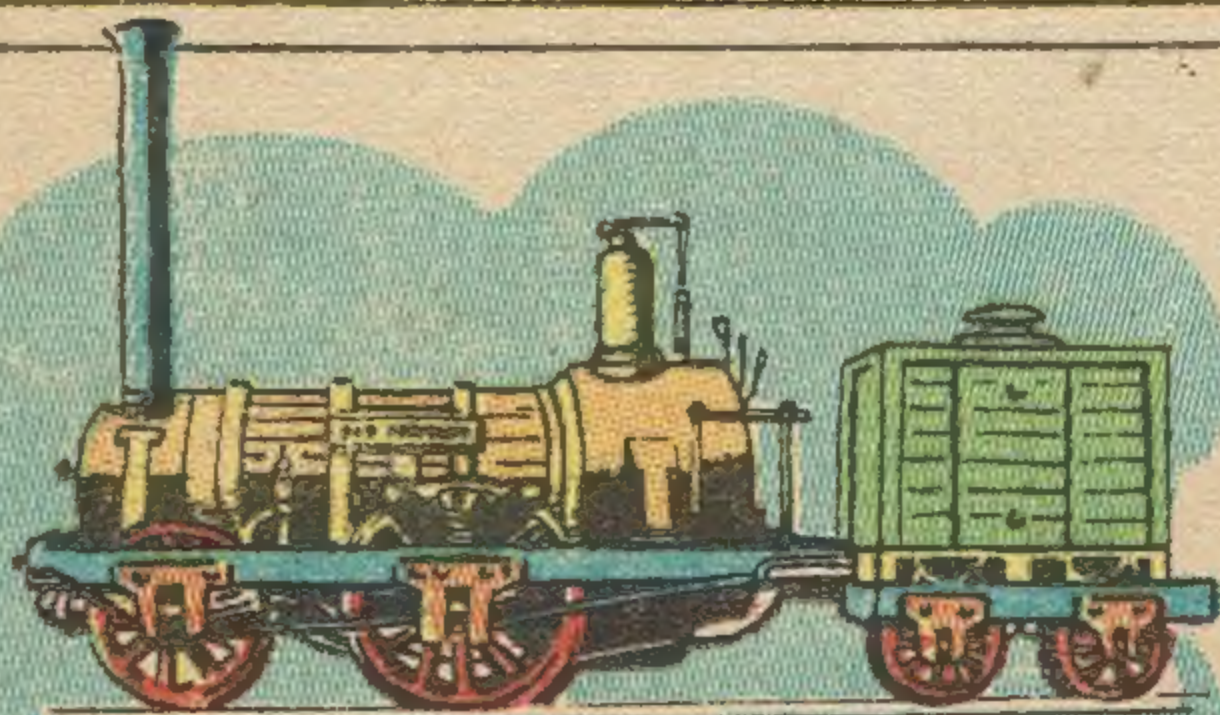




"THE BRITISH-BUILT LOCOMOTIVE, **JOHN BULL**, FIRST PLACED IN SERVICE IN NEW JERSEY IN NOVEMBER, 1831, WAS SOON EQUIPPED WITH A CAB AND THE NEW AMERICAN INVENTION, THE **COWCATCHER**!"



"ANOTHER FAMOUS ENGINE WAS **OLD IRONSIDES**, BUILT BY MATTHIAS BALDWIN, ONE OF OUR PIONEER LOCOMOTIVE BUILDERS."



PRESIDENT ANDREW JACKSON... "OLD HICKORY," WE CALLED HIM, AND HE WAS REALLY IMPRESSED WITH THE SPEED AND SMOOTHNESS OF HIS JOURNEY.

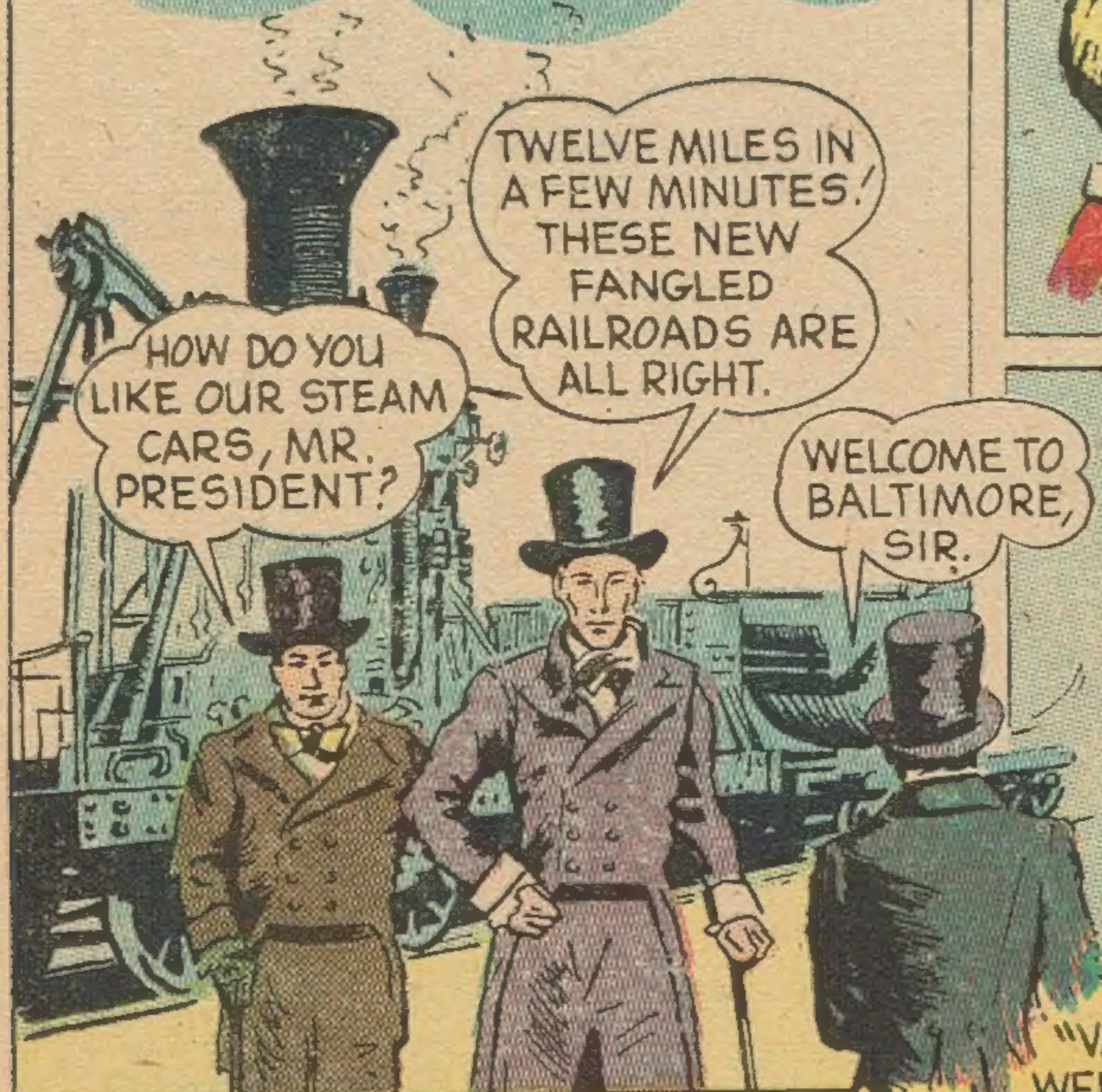
WHO WAS THE FIRST PRESIDENT TO RIDE ON A TRAIN?



HOW DO YOU LIKE OUR STEAM CARS, MR. PRESIDENT?

TWELVE MILES IN A FEW MINUTES! THESE NEW FANGLED RAILROADS ARE ALL RIGHT.

WELCOME TO BALTIMORE, SIR.

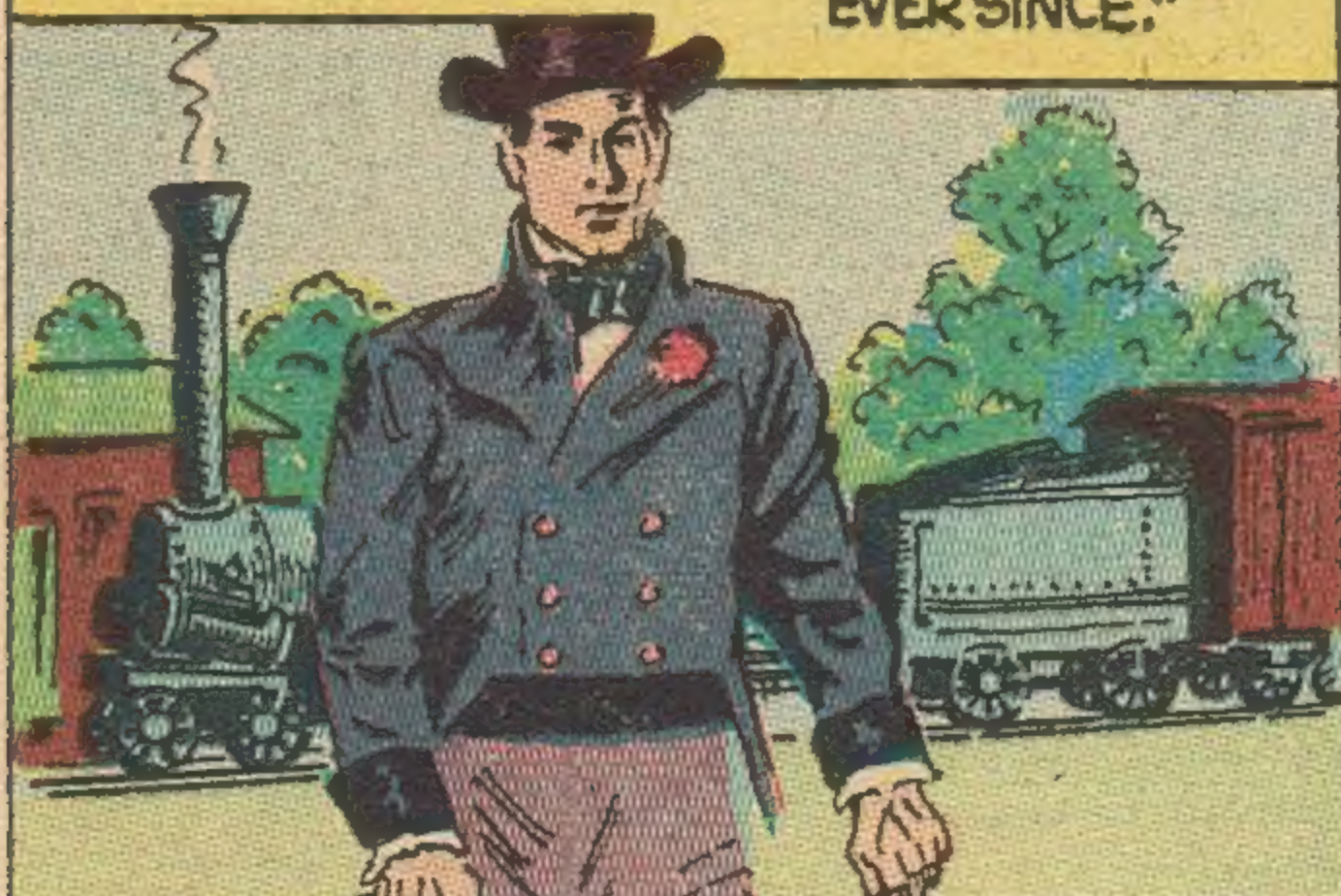


"THAT WAS ON JUNE 6, 1833. PRESIDENT JACKSON RODE FROM ELLICOTT'S MILLS, MARYLAND, TO BALTIMORE."

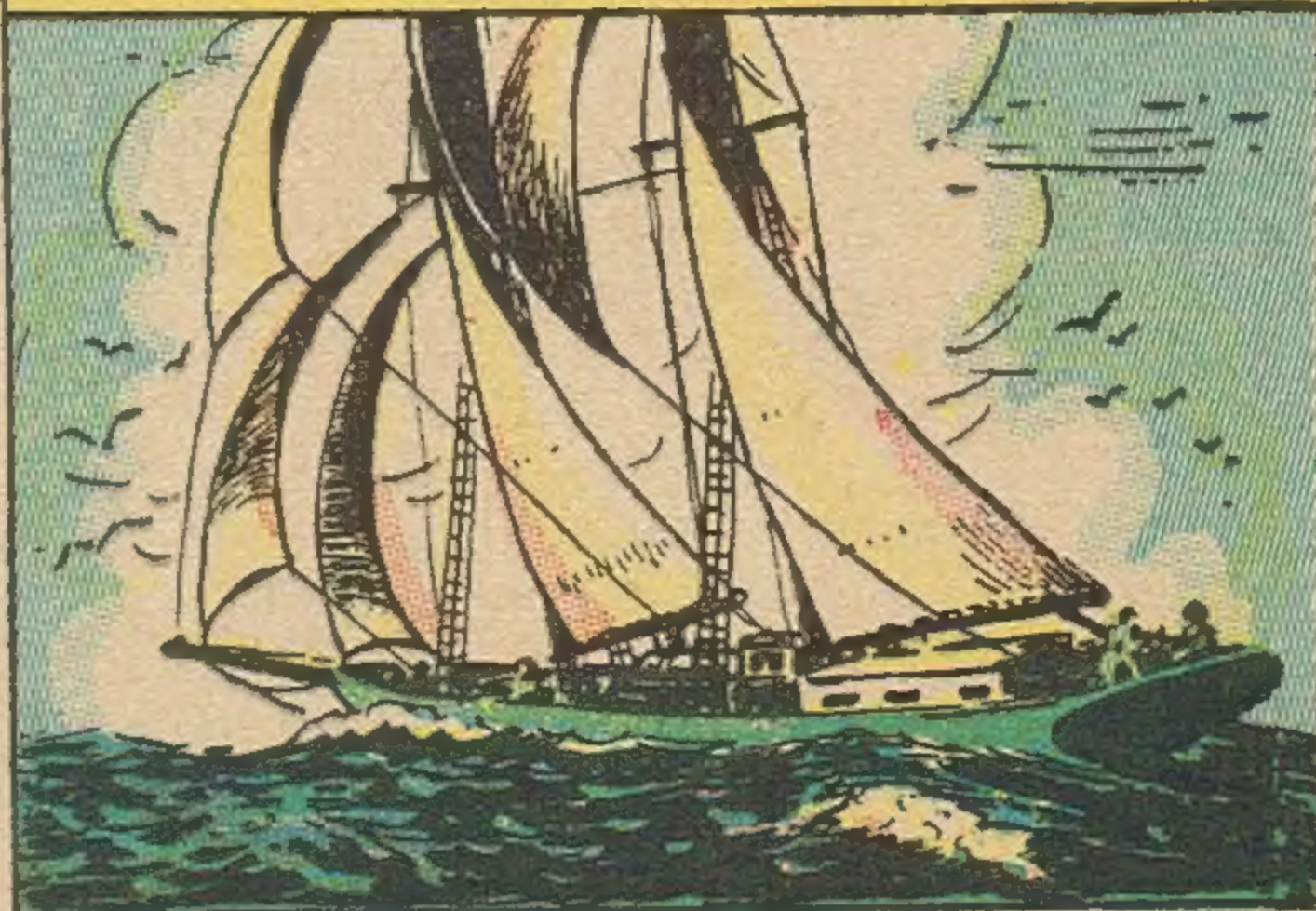
"VARIOUS TYPES OF ENGINES AND CARS WERE BUILT AS RAILROADS SPREAD OVER THE EAST. IN 1837, A SLEEPING CAR - THE WORLD'S FIRST - WAS OPERATED BETWEEN HARRISBURG AND CHAMBERSBURG, PA!"



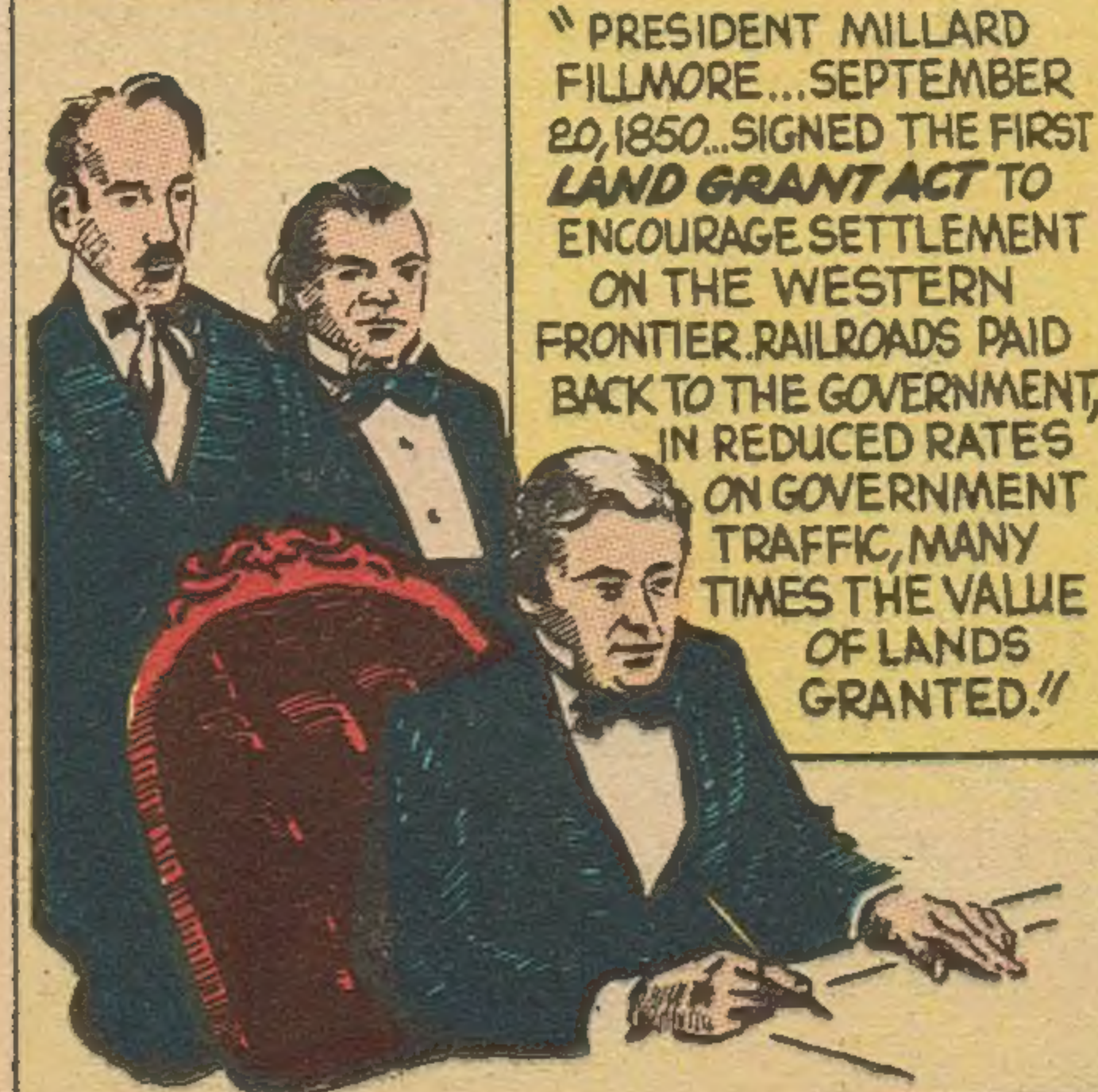
"IN 1839, YOUNG RAILROAD CONDUCTOR, WILLIAM F. HARNDEN, PUT A NEW IDEA TO WORK... EXPRESS SERVICE. BEGINNING WITH ONLY A CARPET BAG IN WHICH TO CARRY PARCELS BETWEEN BOSTON AND NEW YORK, HE SOON HAD A BOX-LIKE 'EXPRESS CAR' PLACED BEHIND THE WOOD-BURNING ENGINE. EXPRESS CARS HAVE BEEN 'HEADING UP' TRAINS EVER SINCE."



"IN THE NEXT TEN YEARS, THE IRON HORSE PUSHED THE FRONTIER BACK TO THE MISSISSIPPI AND OPENED WHOLE NEW AREAS FOR SETTLEMENT. UP ON THE GREAT LAKES, SAILING VESSELS BROUGHT IN ENGINES, CARS, AND RAILS. THAT WAS HOW THE FIRST LOCOMOTIVE REACHED CHICAGO..."



...A FUNNEL-STACKED WOOD-BURNER NAMED THE **PIONEER** WHICH ARRIVED FROM THE EAST IN THE FALL OF 1848 AND SOON CHUGGED ACROSS THE PRAIRIE ON ITS FIRST RUN!!



"PRESIDENT MILLARD FILLMORE... SEPTEMBER 20, 1850... SIGNED THE FIRST **LAND GRANT ACT** TO ENCOURAGE SETTLEMENT ON THE WESTERN FRONTIER. RAILROADS PAID BACK TO THE GOVERNMENT, IN REDUCED RATES ON GOVERNMENT TRAFFIC, MANY TIMES THE VALUE OF LANDS GRANTED."



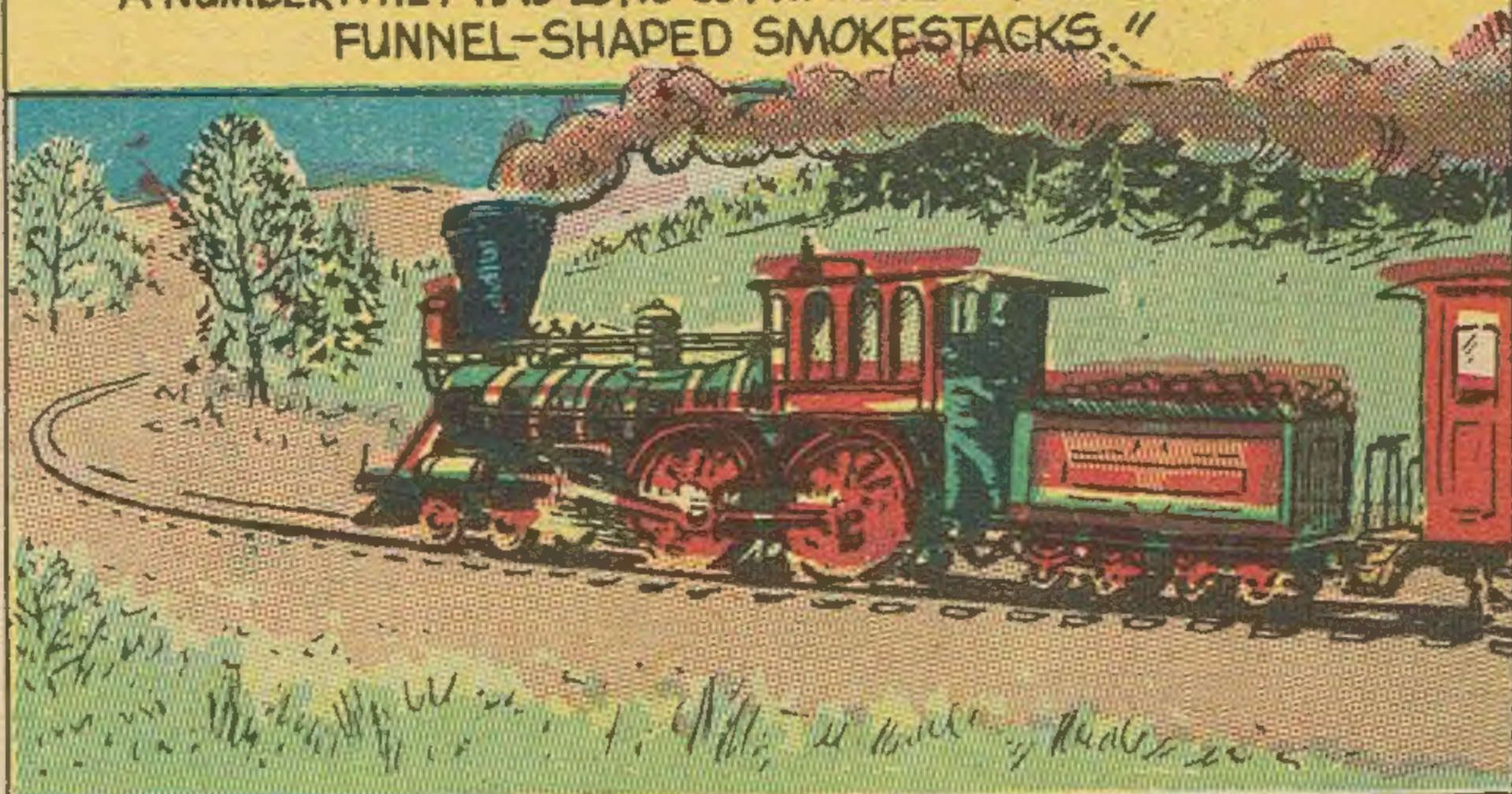
THE CALIFORNIA GOLD RUSH WAS IN FULL SWING... PEOPLE BY THE THOUSANDS FOLLOWED THE 'FORTY-NINERS' WESTWARD. BY SHIP, BY WAGON TRAIN, BY STAGE COACH, ON HORSEBACK AND EVEN AFOOT, THEY POURED INTO THE GOLD COUNTRY. SETTLEMENTS SPRANG UP QUICKLY."





"RAILROADS HAD COME A LONG WAY IN THOSE FIRST 25 YEARS, AND I WAS REAL PROUD OF THE WAY THE IRON HORSE HELPED SETTLE THE COUNTRY AND BUILD IT UP. CARS AND TRACK HAD BEEN IMPROVED. OIL LAMPS WERE IN USE ON TRAINS, THE REFRIGERATOR CAR HAD BEEN PUT IN SERVICE."

"BY THE 1850'S THE LOCOMOTIVE HAD DEVELOPED INTO A STANDARD TYPE...THE AMERICAN OR 4-4-0 TYPE...FOUR SMALL WHEELS IN FRONT (LEADING TRUCK WHEELS) AND FOUR LARGE DRIVING WHEELS. BRASS-TRIMMED AND GAILY PAINTED, EACH ENGINE HAD A NAME AS WELL AS A NUMBER. THEY HAD LONG COWCATCHERS AND BROAD FUNNEL-SHAPED SMOKESTACKS."



THIS WAY WE CAN BETTER VIEW AND ENJOY THE FINE COUNTRY.

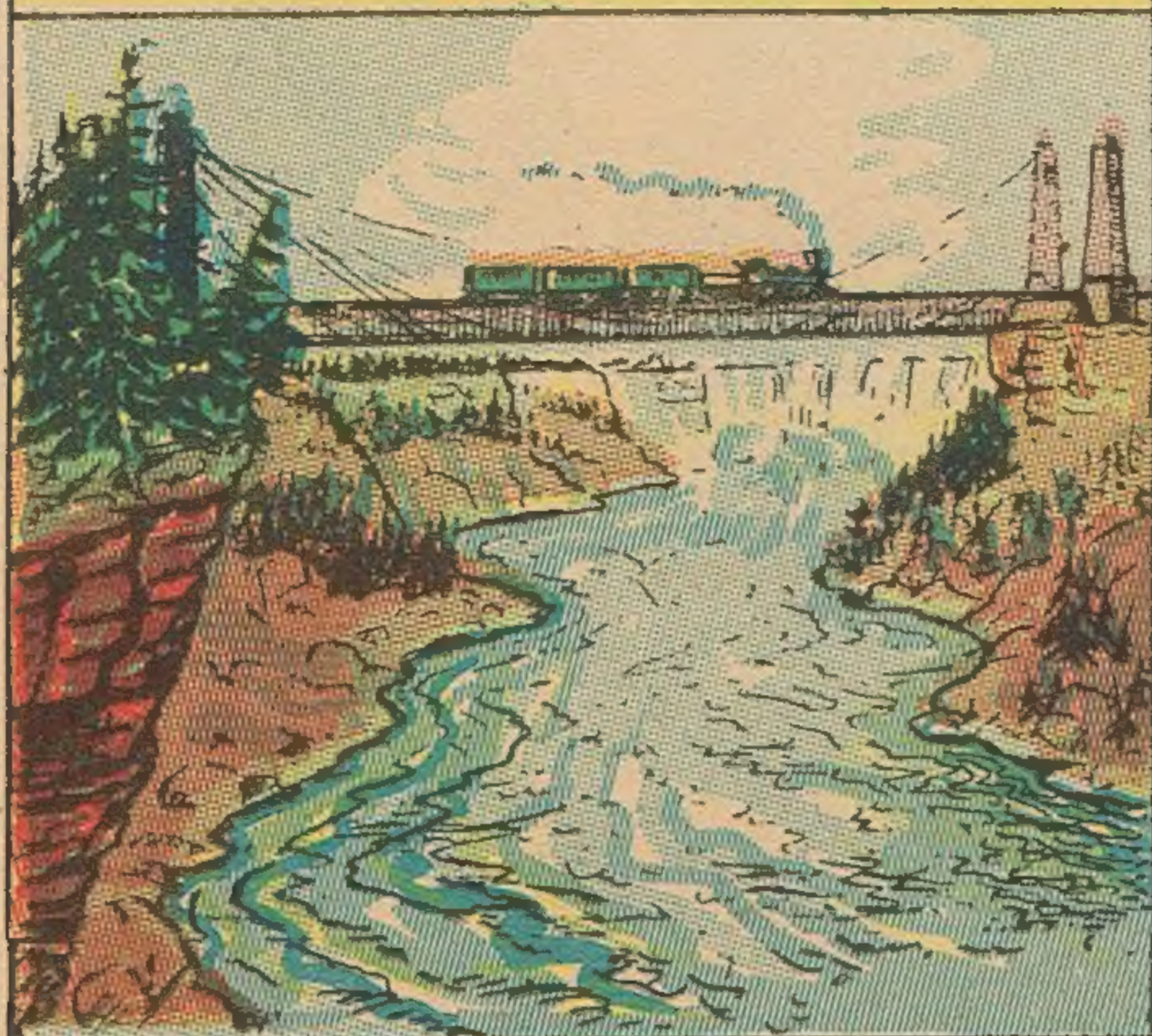


"PEOPLE FLOCKED TO RIDE THE 'STEAM CARS' AND EXCURSION TRAINS WERE POPULAR. WHEN A RAILROAD WAS OPENED FROM NEW YORK TO LAKE ERIE, DANIEL WEBSTER, AT HIS OWN REQUEST, MADE PART OF THE TRIP IN A ROCKING CHAIR FASTENED TO A FLAT CAR SO THAT HE COULD BETTER OBSERVE THE SCENERY."

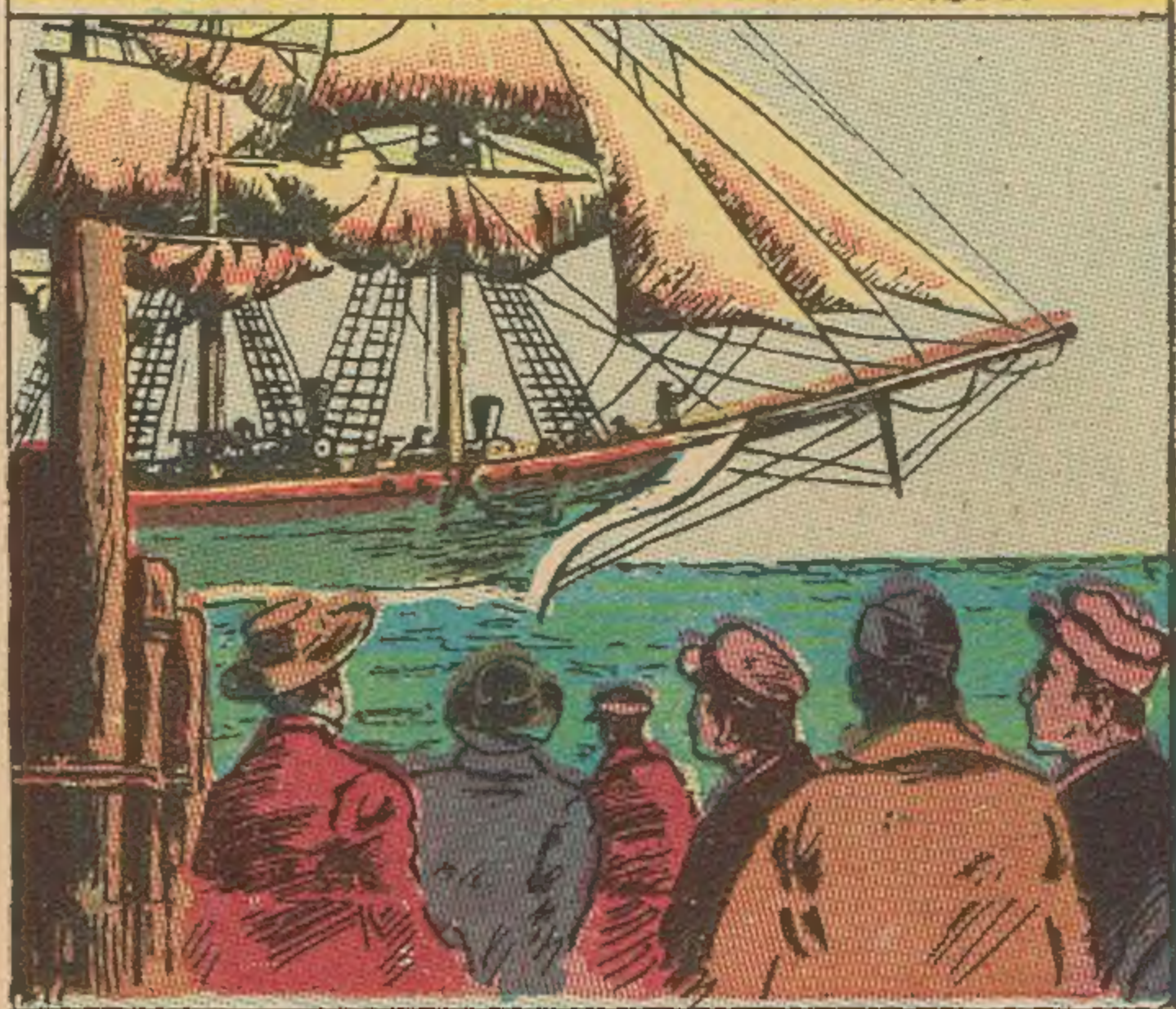
"NEW INVENTIONS, NEW DEVELOPMENTS IN RAIL-ROADING WERE COMING SWIFTLY. IN 1851, RAILROADS PUT THE TELEGRAPH TO WORK FOR TRAIN DISPATCHING. CHARLES MINOT, A RAILROAD SUPERINTENDENT, WAITING ON A WEST BOUND TRAIN, SENT THE FIRST TRAIN ORDERS BY TELEGRAPH."



"IN MARCH, 1855, THE NIAGARA SUSPENSION BRIDGE WAS COMPLETED..."

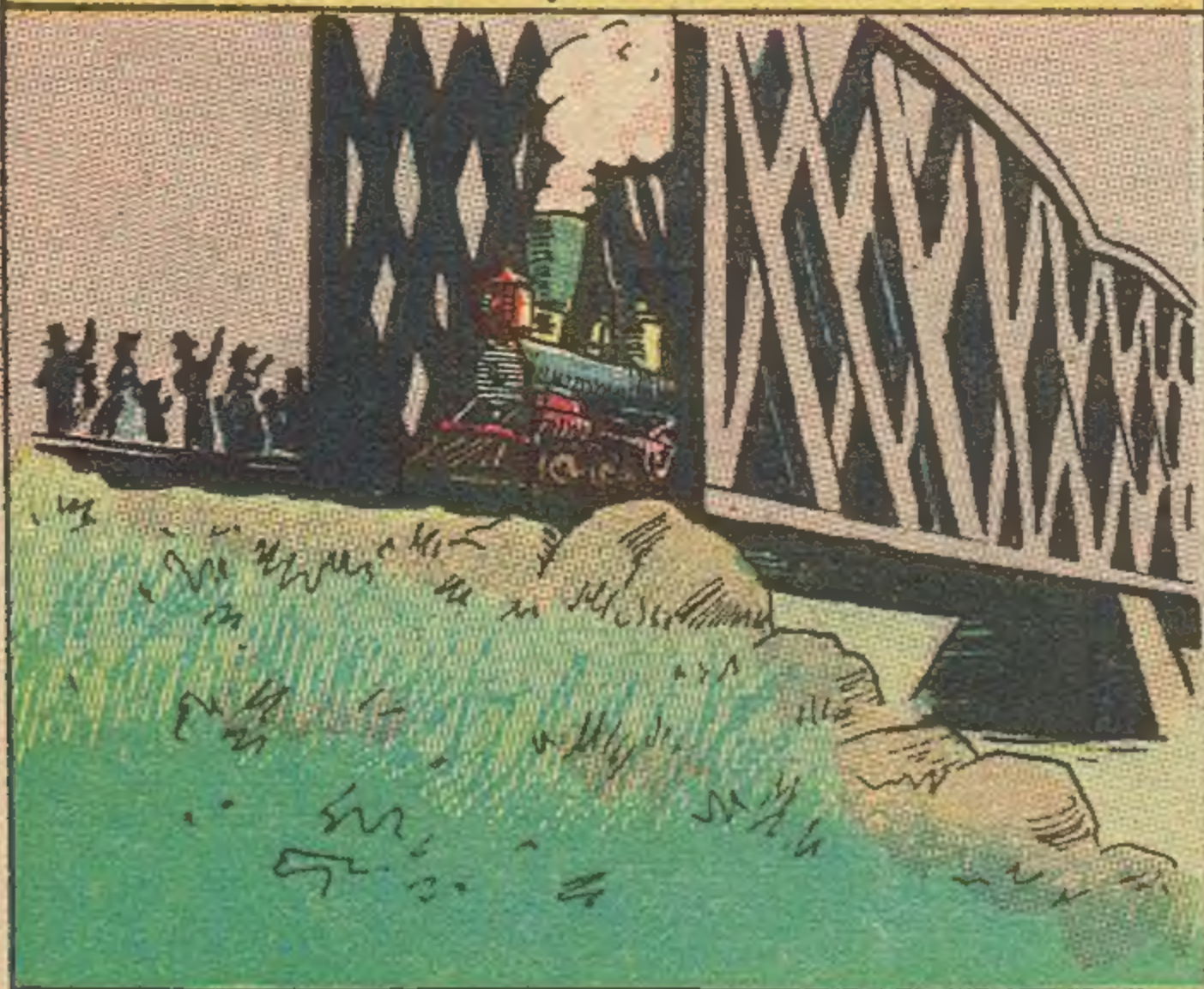


...AND ON THE OTHER SIDE OF THE CONTINENT, THE IRON HORSE REACHED CALIFORNIA...ABOARD A SAILING SHIP AROUND THE 'HORN'...IN 1855."

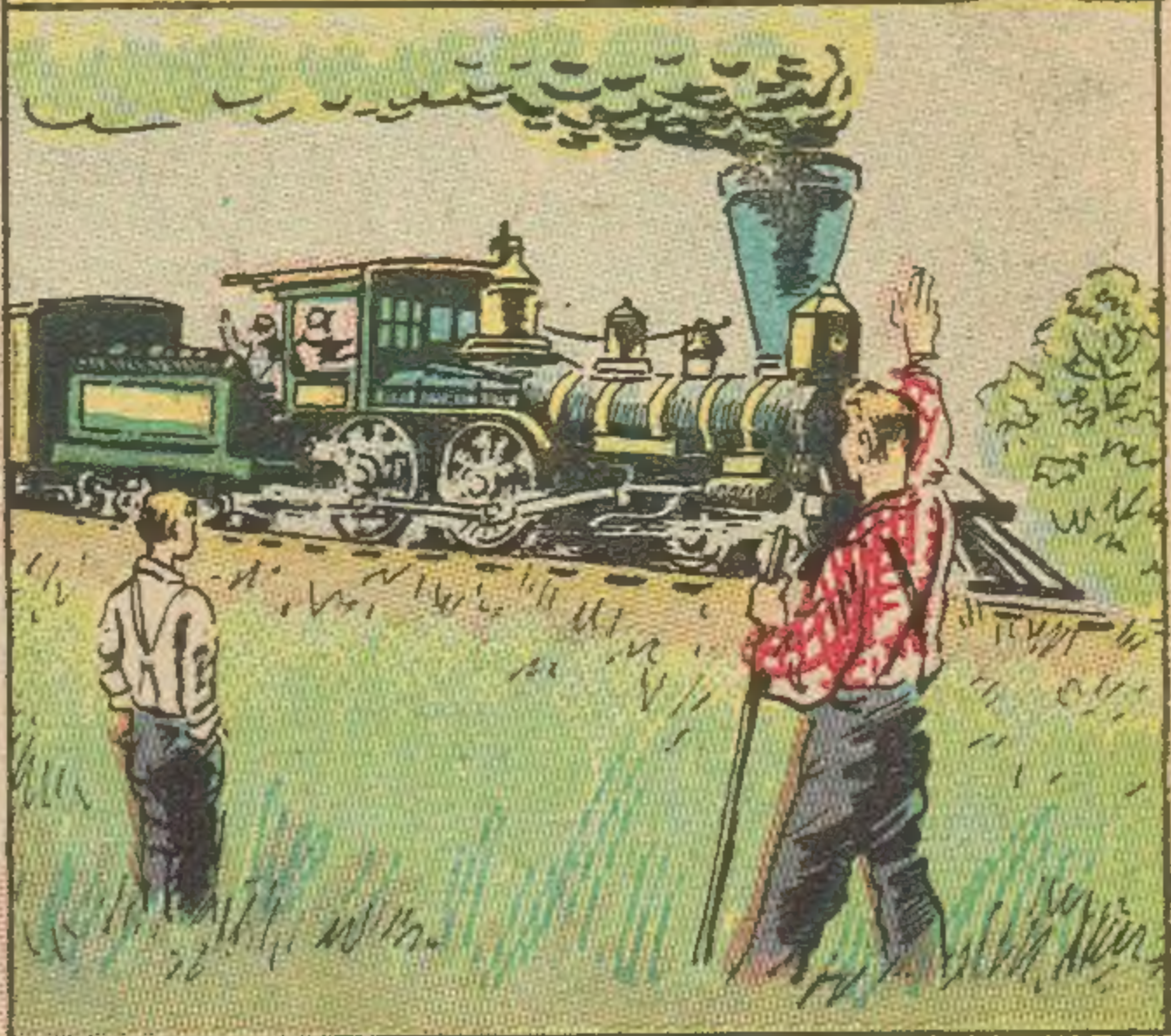




"THE FIRST RAILROAD BRIDGE ACROSS THE MISSISSIPPI WAS OPENED AT DAVENDORT, IOWA, IN 1856..."



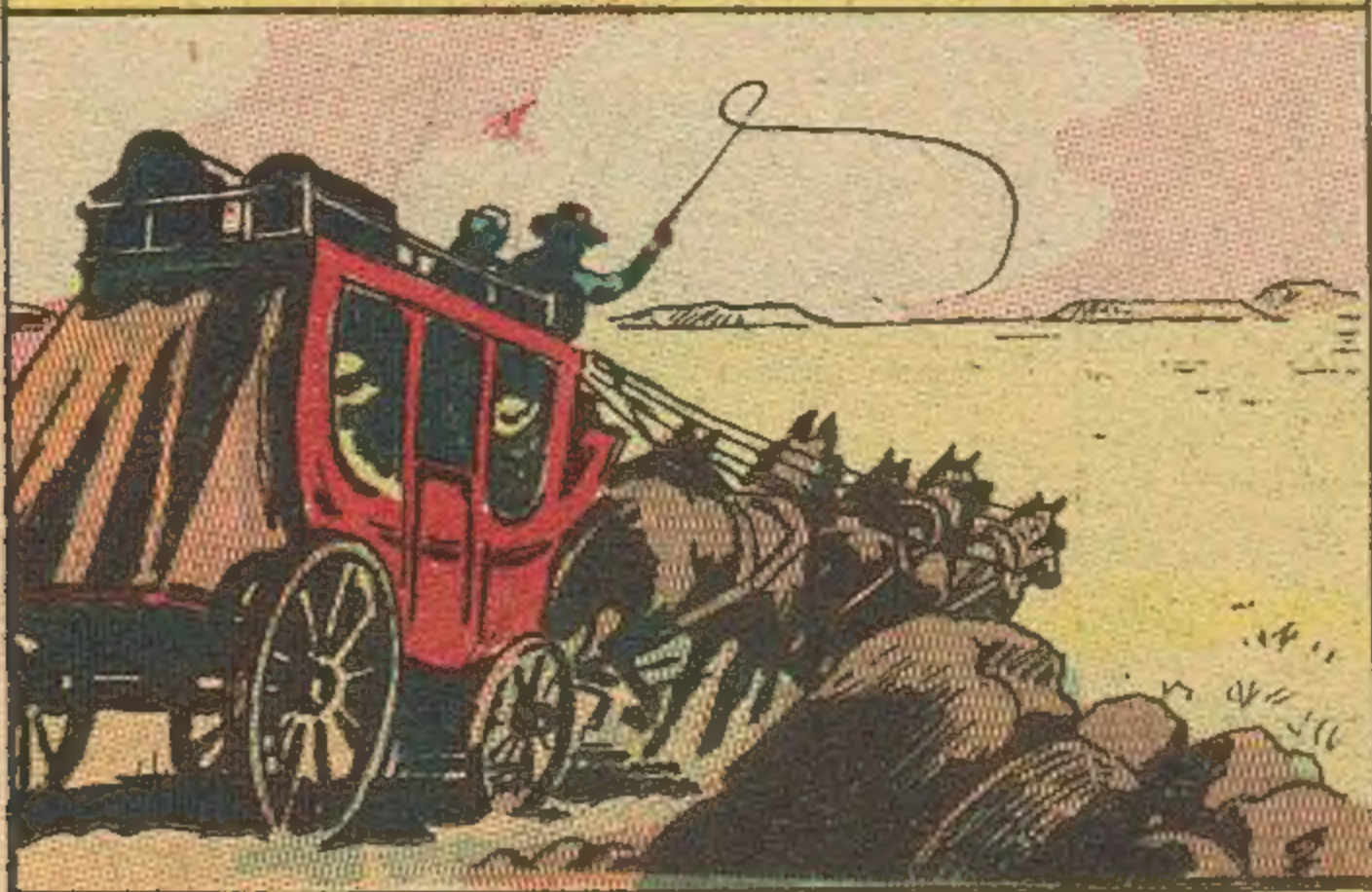
...AND IN 1859, THE IRON HORSE REACHED THE MISSOURI, AT ST. JOSEPH!"



BY THAT TIME, TRACKS WERE STRONGER, TRAINS WERE HEAVIER. LOCOMOTIVES WERE A LOT BIGGER AND STRONGER, TOO, AND CARS HAD BEEN IMPROVED. IN 1859, THE FIRST **PULLMAN** SLEEPING CAR WENT INTO SERVICE.



"BETWEEN THE RAILHEAD AT 'ST. JO' AND THE GOLDEN GATE THERE WERE 2,000 MILES OF PLAINS, MOUNTAINS, AND DESERTS. ACROSS THIS VAST EXPANSE CAME FIRST PLAINSMEN AND TRAPPERS IN SMALL PARTIES. FUR BRIGADES WENT UP THE MISSOURI. THE OVERLAND STAGES CARRIED PASSENGERS, MAIL, AND EXPRESS TO CALIFORNIA... A THREE WEEKS' TRIP IN GOOD WEATHER."



"THE DARING RIDERS OF THE PONY EXPRESS RACED THEIR HORSES BACK AND FORTH ACROSS THE WEST... 'ST. JO' TO SAN FRANCISCO IN 8 TO 10 DAYS..."



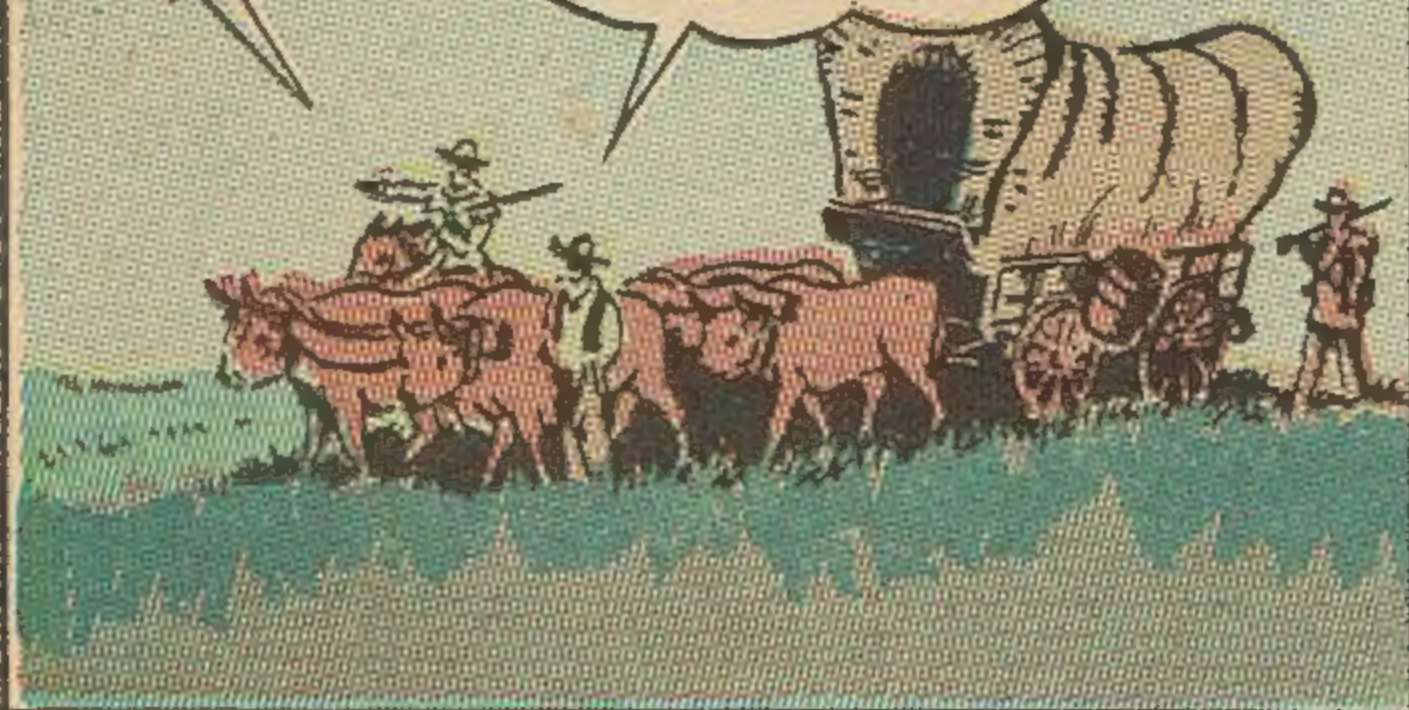


...AND LONG LINES OF PRAIRIE SCHOONERS ROLLED WESTWARD TO THE TUNE OF STEPHEN FOSTER'S POPULAR SONGS WHICH WERE SWEEPING THE COUNTRY."

"BUT ON THE GREAT PLAINS AND IN NORTHERN MOUNTAINS THE INDIAN TRIBES WERE RISING. IN THE CAMPS OF THE WARLIKE SIOUX, EXCITEMENT WAS ASTIR."

WHAT WE NEED ACROSS THESE PLAINS IS A RAILROAD.

WE'LL HAVE IT, TOO, IN A FEW YEARS... I HEAR THAT OUR NEW PRESIDENT, ABE LINCOLN, IS FOR IT AND THE SURVEYORS ARE OUT NOW.



MORE AND MORE WHITE MEN ARE ENTERING OUR LANDS... KILLING THE BUFFALO... WE MUST STOP THEM!

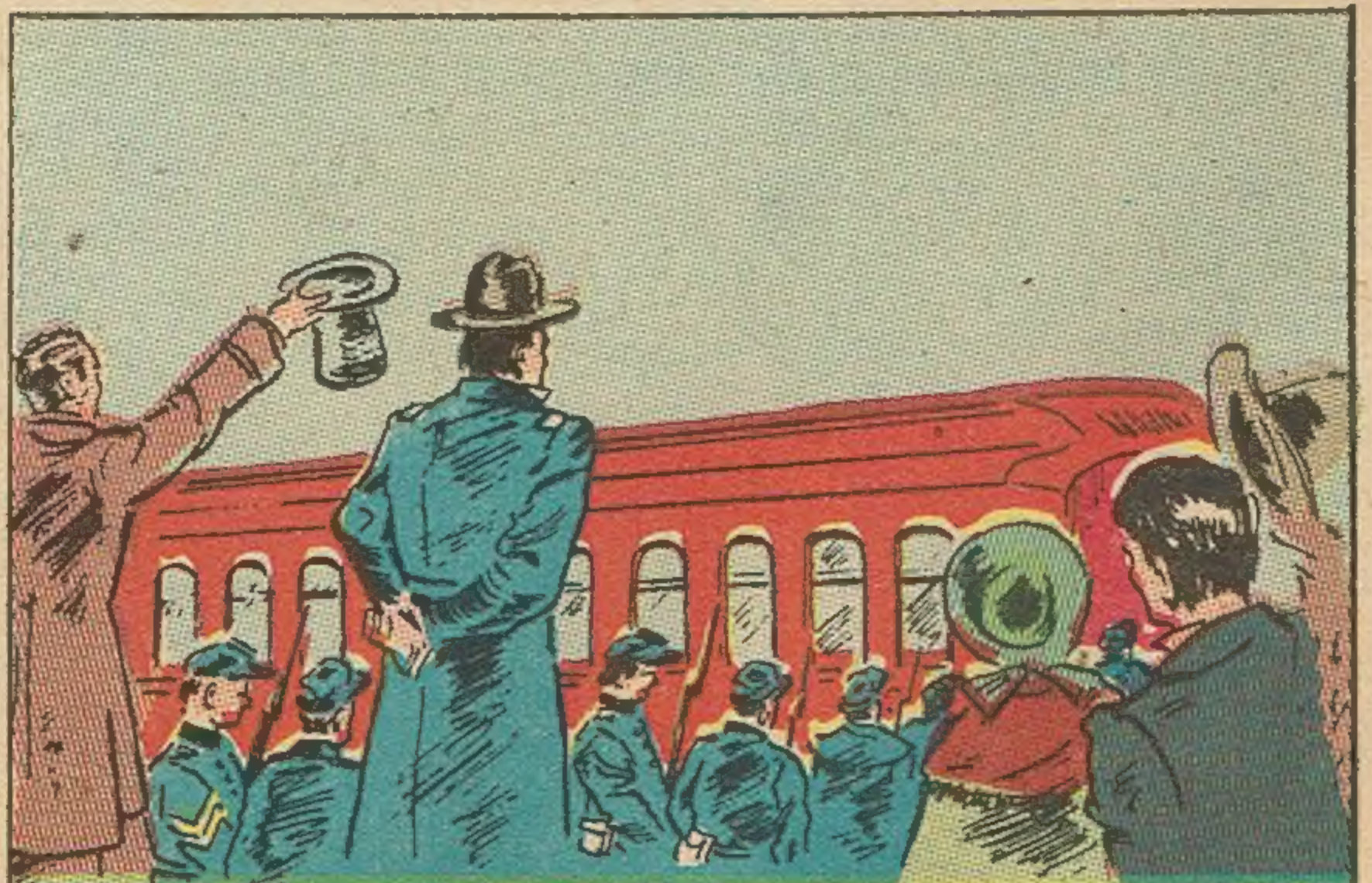
OUR YOUNG MEN WILL TAKE THE WAR TRAIL. EAGER FOR SCALPS, THEY WILL STRIKE THESE CRAWLING WAGONS FROM THEIR SWIFT PONIES.



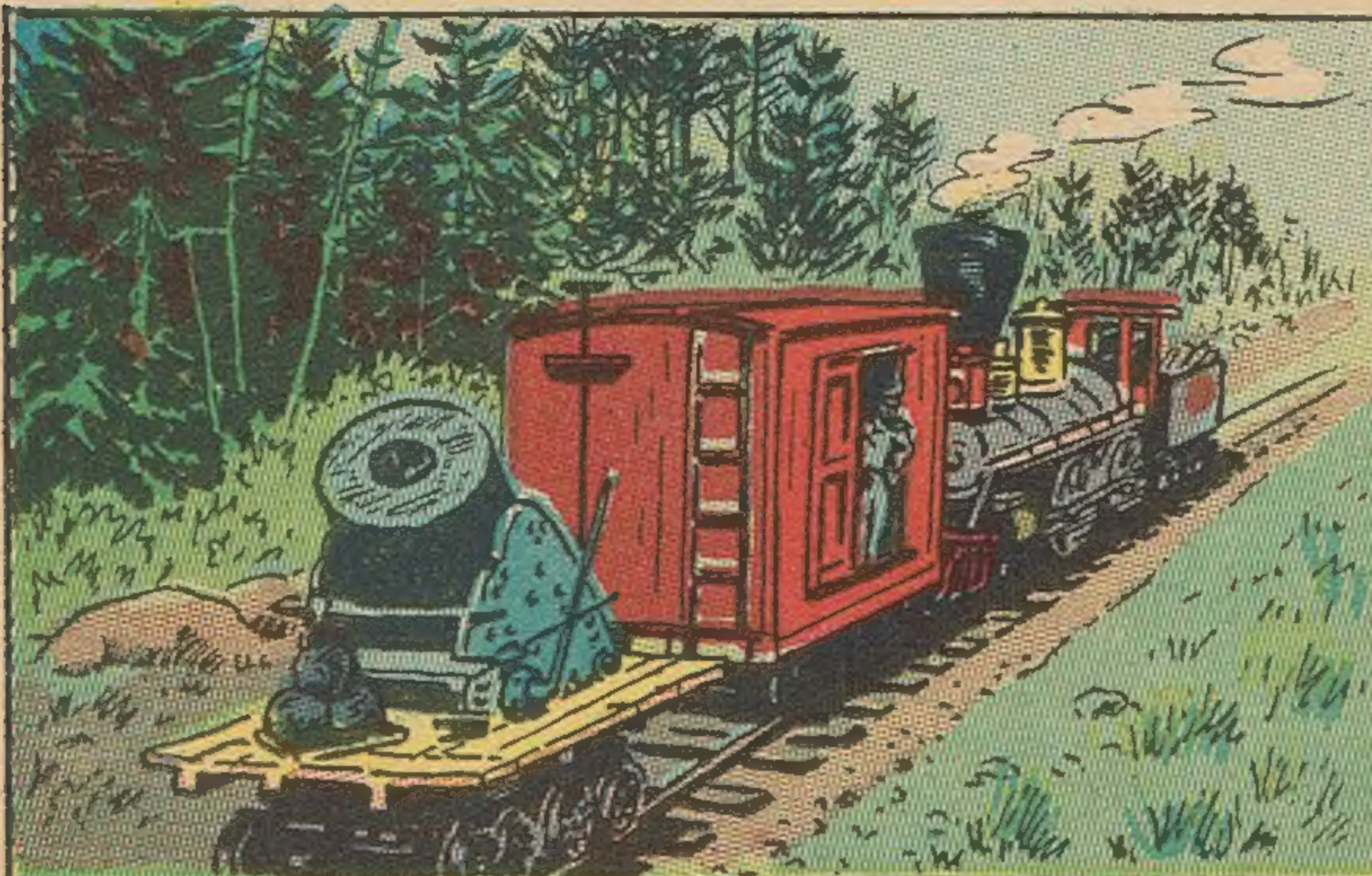
"TROUBLE WITH THE INDIANS INCREASED AS THE 1860'S BEGAN. THEY ATTACKED WAGON TRAINS AND AMBUSHED SURVEYING PARTIES LAYING OUT ROUTES FOR RAIL LINES. BUT SURVEYS WERE MADE AND PLANS FOR A RAILROAD TO THE FAR WEST WENT FORWARD AS ABE LINCOLN TOOK OFFICE AS PRESIDENT.

WE WERE BUSY OPENING THE WEST WHEN ALL OF A SUDDEN... IN 1861... THE WAR BETWEEN THE STATES BROKE OUT. RAILROADS WENT INTO ACTION AT ONCE. IN BOTH THE NORTH AND THE SOUTH THEY PERFORMED A TREMENDOUS SERVICE OF SUPPLY. THIS WAS THE FIRST WAR

IN WHICH RAILROADS HAD FIGURED AND, NORTH AND SOUTH, THEY CAME THROUGH WITH FLYING COLORS."



"RAILROAD TRAINS TRANSPORTED TROOPS TO TRAINING CENTERS AND TO THE FIGHTING FRONTS "



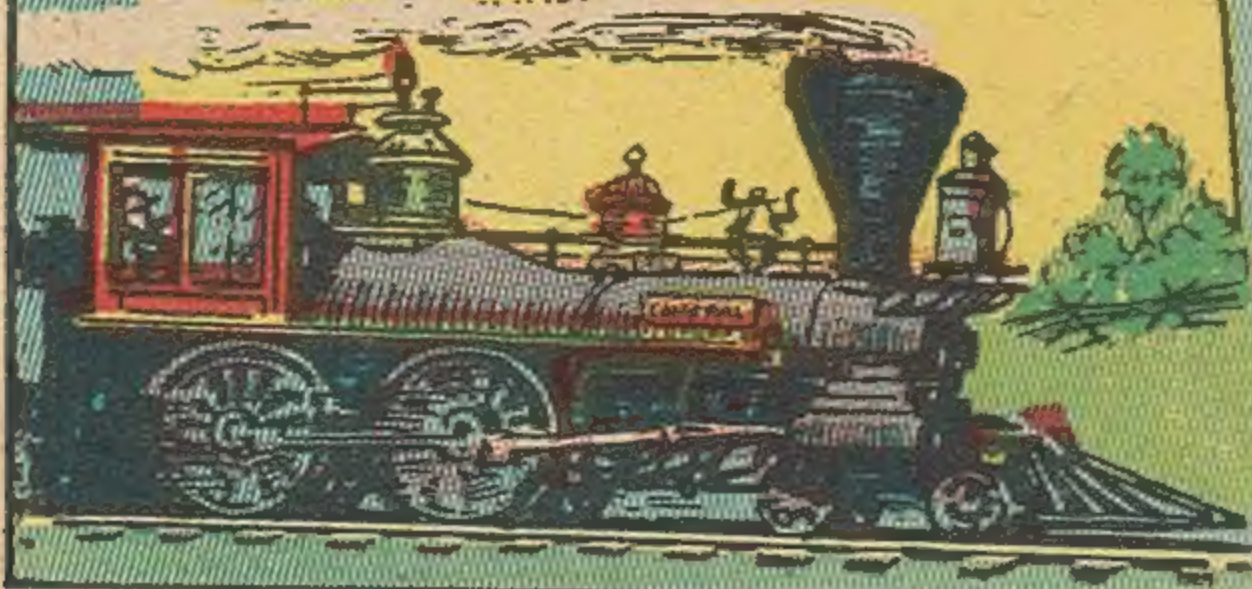
"HEAVY GUNS, MOUNTED ON RAILROAD CARS, WERE MOVED RIGHT UP TO THE BATTLE LINES. SOMETIMES THE TRAINS WERE IN THE ACTUAL FIGHTING."

I DIDN'T KNOW RAILROADS PLAYED SUCH AN IMPORTANT PART IN THE CIVIL WAR. WHAT WAS THE MOST EXCITING TRAIN FIGHT YOU REMEMBER?





"THE CHASE OF THE **GENERAL** ON APRIL 12, 1862, A STORY OF DARING AMONG RAILROADERS OF BOTH NORTH AND SOUTH. THE **GENERAL** WAS A LOCOMOTIVE ON A GEORGIA RAILROAD... A TOUGH, FAST WHEELING WOOD-BURNER OF THE 4-4-0 TYPE. THAT APRIL MORNING, IT PULLED A PASSENGER TRAIN OUT OF ATLANTA FOR CHATTANOOGA, TENN. ON BOARD WERE 20 UNION SOLDIERS... ALL RAILROADMEN... DRESSED AS CIVILIANS AND LED BY ANDREWS, A FEDERAL SPY. HIS PLAN WAS TO STEAL THE ENGINE AND DASH NORTHWARD, TEARING UP TRACK AND CUTTING THE CONFEDERATE LINE OF COMMUNICATIONS TO CHATTANOOGA."

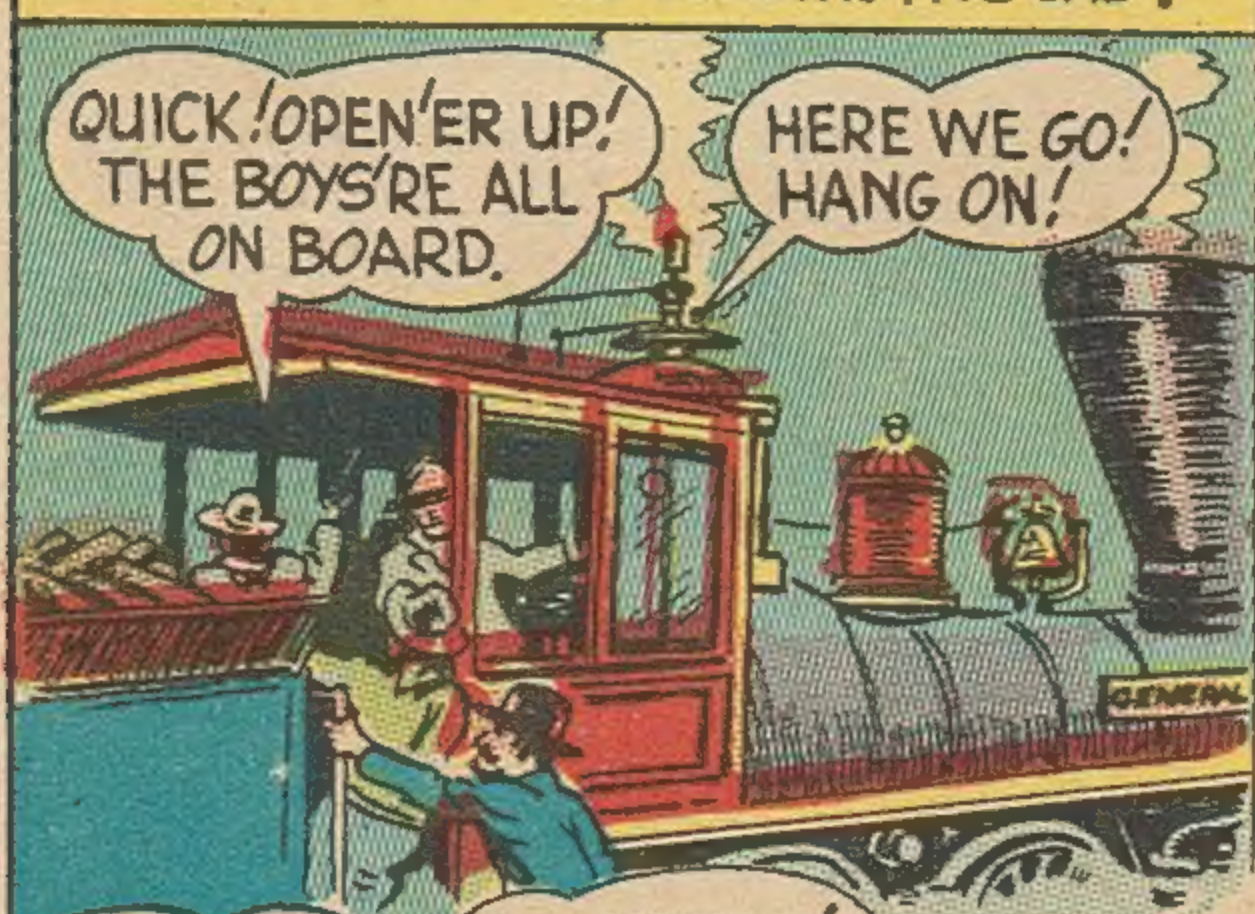


"AT BIG SHANTY, WHERE A CONFEDERATE TRAINING CAMP WAS LOCATED, SOME 20 MILES FROM ATLANTA, THE TRAIN STOPPED FOR BREAKFAST. THE TRAIN CREW HURRIED INTO THE EATING HOUSE."



BIG SHANTY!  
ALL OUT FOR  
BREAKFAST!

"CONDUCTOR W.A. FULLER AND HIS ENGINEER, JEFF CAIN, HAD TAKEN SEATS AT THE TABLE WHEN FULLER, WHO WAS FACING THE WINDOW TOWARD THE TRACK, SAW SEVERAL MEN CLIMBING INTO THE LOCOMOTIVE CAB."



QUICK! OPEN'ER UP!  
THE BOYS'RE ALL  
ON BOARD.

HERE WE GO!  
HANG ON!

WE'LL GAIN  
ON'EM NOW.  
THEY'LL BE  
HELD UP BY  
FREIGHTS AT  
KINGSTON.

OLD **YONAH'S**  
DOING SIXTY  
NOW, CAP.

LET'ER  
ROLL, JEFF!



...WHERE THEY BOARDED THE **YONAH**, AN OLD YARD ENGINE, AND, JOINED BY CONFEDERATE SOLDIERS, KEPT UP THE CHASE. BUT THE RAIDERS HAD CLEARED KINGSTON, PRETENDING TO HAVE AN AMMUNITION TRAIN. LEAVING THE **YONAH**, FULLER AND HIS MEN TOOK A FREIGHT ENGINE...

HEY! SOMEBODY'S  
STEALING THAT  
TRAIN!

YANKEE SPIES!  
COME ON, MEN,  
WE'VE GOT TO  
CATCH THEM!



"LEAPING TO HIS FEET, FULLER RACED OUT OF THE BUILDING, FOLLOWED BY THE TRAIN CREW. BUT THE RAIDERS HAD UNCOUPLED THE ENGINE AND THREE HEAD-END BOXCARS FROM THE COACHES AND WERE SPEEDING UP THE LINE. LED BY FULLER, THE CREW PURSUED THE TRAIN ON FOOT TWO MILES, THEN GETTING A HAND-CAR, PUSHED ON TO ETOWAH..."



...AND SPED ON, HINDERED BY TIES ON THE RAILS AND FINALLY STOPPED BY TORN-UP TRACK. FULLER RAN TWO MILES, STOPPED A SOUTHBOUND FREIGHT, SWITCHED THE CARS ONTO A SIDING, AND CONTINUED THE CHASE ON BOARD THE ENGINE **TEXAS**, RUNNING BACKWARD. MEANWHILE, THE RAIDERS HAD CUT TELEGRAPH WIRES, LEFT TWO BOXCARS BEHIND AND SET FIRE TO THE LAST ONE IN AN ATTEMPT TO BURN A COVERED BRIDGE...



...BUT THE PURSUING ENGINE COUPLED ONTO THE BLAZING BOXCAR AND PUSHED IT ACROSS THE TRESTLE AND OUT OF THE WAY. THE **TEXAS** GAINED RAPIDLY, SOON OVERTOOK THE **GENERAL**. THE CHASE WAS OVER AND CONDUCTOR FULLER HAD WON. LEAVING FROM THE STOLEN ENGINE, THE RAIDERS TOOK TO THEIR HEELS BUT WERE ALL CAPTURED BY THE CONFEDERATES. IT WAS A WILD RIDE AND A WILD PURSUIT, BUT THERE WAS NO FEAR OR HOLDING BACK ON EITHER SIDE."

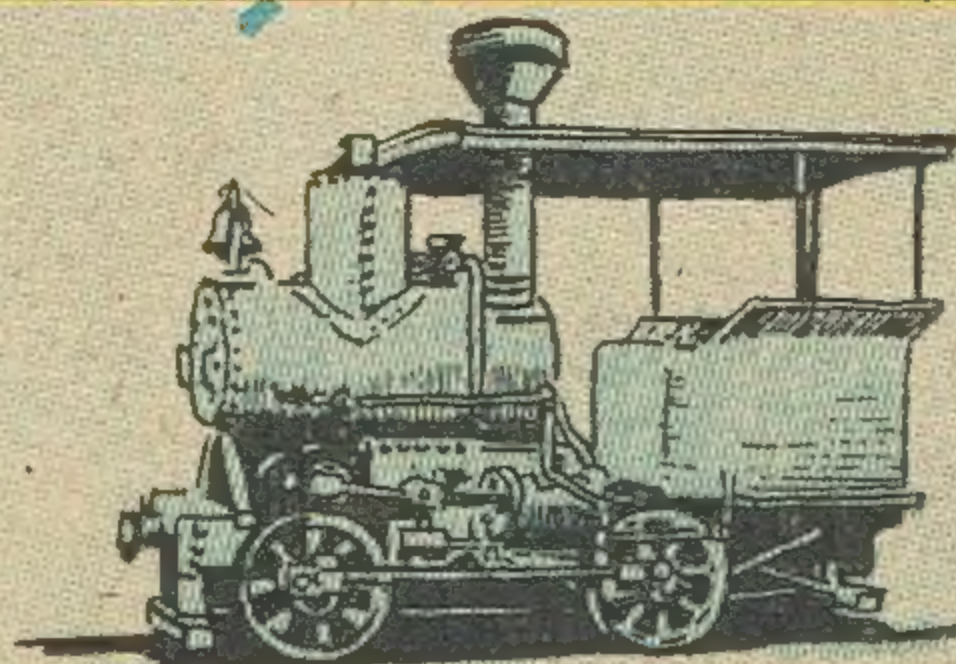


"EVEN THE WAR DID NOT STOP RAILROAD EXPANSION. ON JULY 1, 1862, PRESIDENT LINCOLN SIGNED AN ACT AUTHORIZING CONSTRUCTION OF A RAILROAD FROM THE MISSOURI RIVER TO THE PACIFIC COAST. THE FOLLOWING YEAR HE FIXED THE EASTERN END OF THE PROPOSED RAIL ROUTE AT OMAHA, NEBRASKA TERRITORY. IN CALIFORNIA, A COMPANY WAS ORGANIZED TO BUILD EASTWARD FROM SACRAMENTO TO MEET THE ROAD FROM OMAHA. LINCOLN, WHO ONCE HANDLED LEGAL CASES FOR A RAILROAD, KNEW THAT THE IRON HORSE WOULD OPEN THE WEST."

NO OTHER IMPROVEMENT... CAN EQUAL IN UTILITY THE RAILROAD...



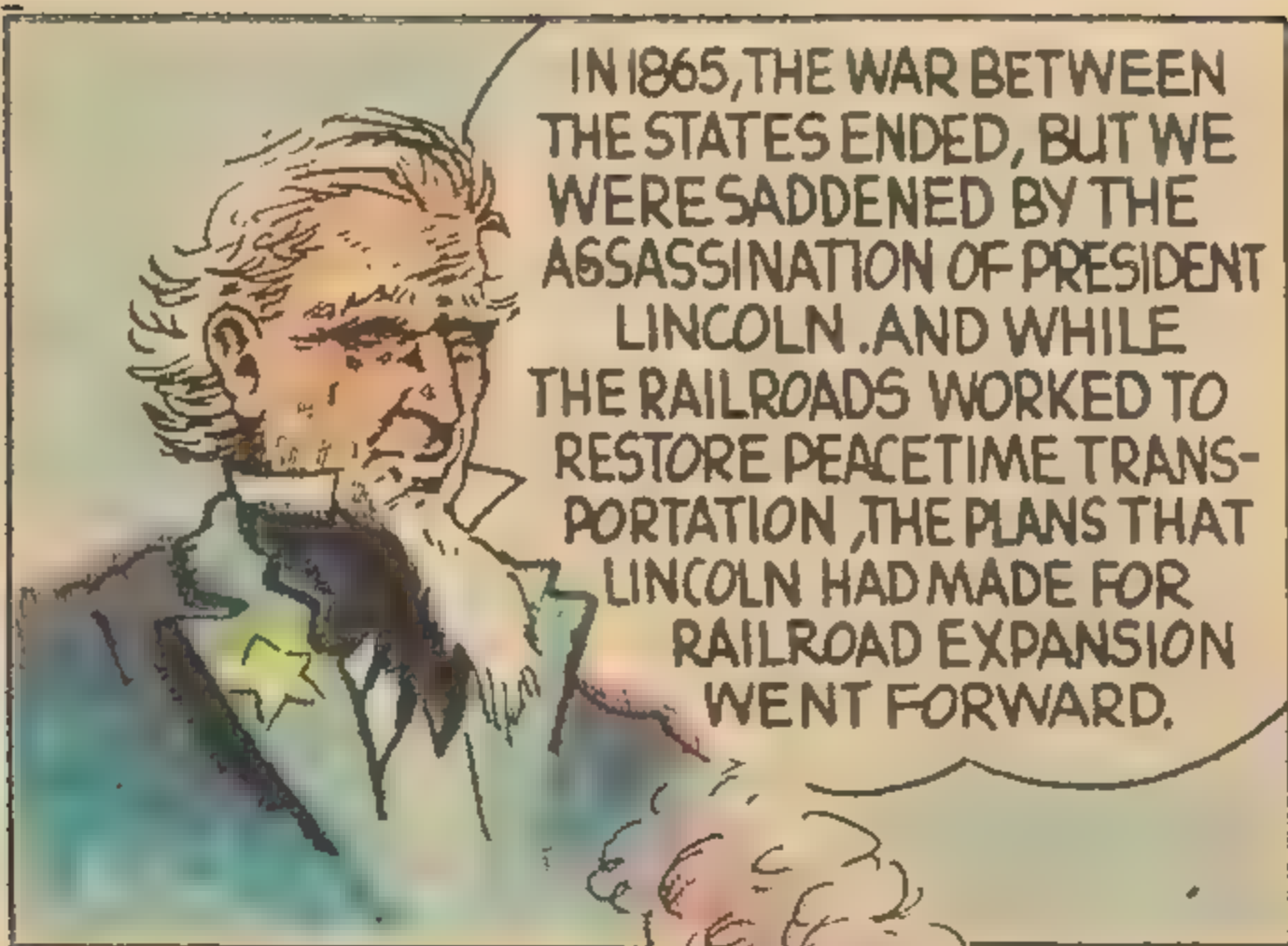
"IN 1862, THE FIRST LOCOMOTIVE IN THE PACIFIC NORTHWEST...THE **OREGON PONY**... REACHED PORTLAND."



"ALSO IN 1862, THE FIRST EXPERIMENTAL POST OFFICE CAR FOR SORTING MAIL EN ROUTE WENT INTO SERVICE ON THE OLD 'ST. JO' ... HANNIBAL TO ST. JOSEPH, MISSOURI!"

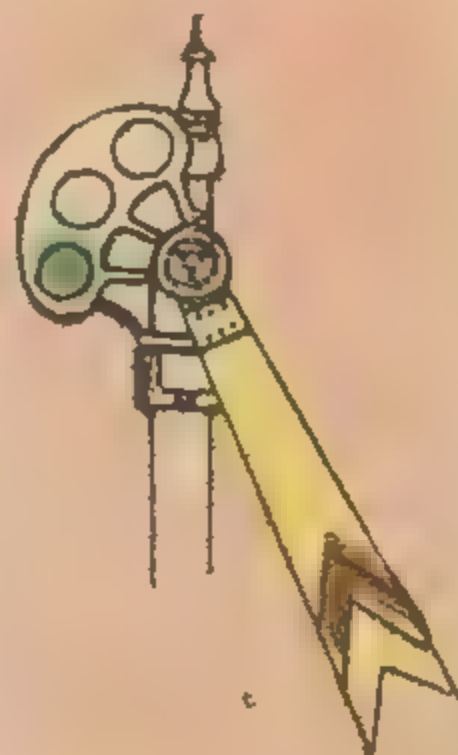






IN 1865, THE WAR BETWEEN THE STATES ENDED, BUT WE WERE SADDENED BY THE ASSASSINATION OF PRESIDENT LINCOLN. AND WHILE THE RAILROADS WORKED TO RESTORE PEACETIME TRANSPORTATION, THE PLANS THAT LINCOLN HAD MADE FOR RAILROAD EXPANSION WENT FORWARD.

"RAILROADS QUICKLY REBUILT AND REPAIRED TRACK AND EQUIPMENT DAMAGED BY THE WAR. THERE WERE NEW IMPROVEMENTS, NEW INVENTIONS. IN 1865, THE FIRST BLOCK-SIGNAL SYSTEM WAS USED, AND A YEAR LATER, AUTOMATIC BLOCK SIGNALS WERE INTRODUCED. THEY REPLACED THE OLD HIGHBALL SIGNALS (WHEN THE BALL WAS AT THE TOP OF THE POLE IT MEANT 'CLEAR TRACK'... HENCE THE TERM 'HIGHBALL' FOR FULL SPEED AHEAD)."



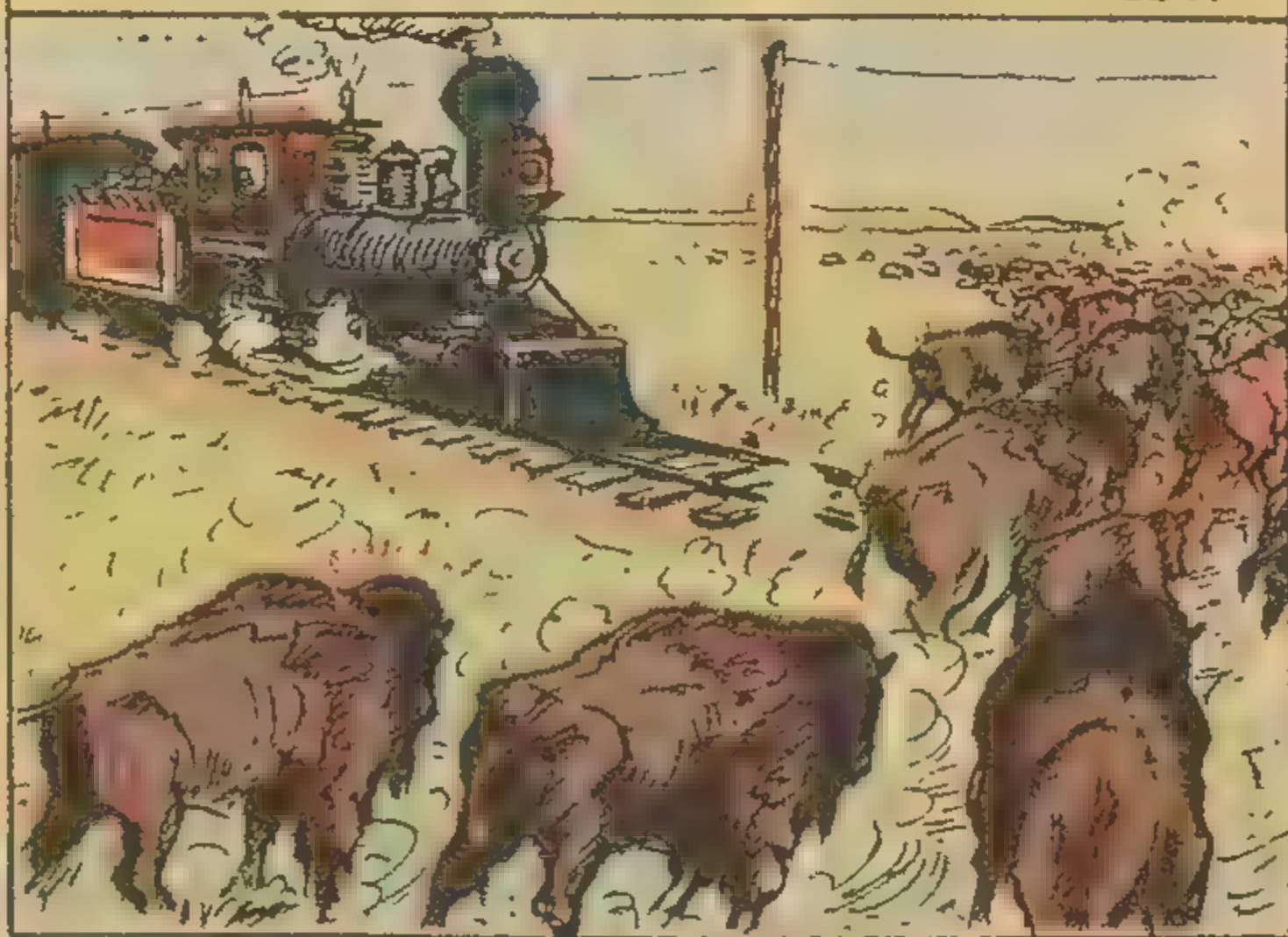
"FOR THE RAILROADS, IT WAS NOW 'WESTWARD HO!' THE RAILS WERE PUSHED ACROSS THE PLAINS; CONSTRUCTION FORCES GUARDED BY SOLDIERS. ALONG WITH CONSTRUCTION AND SUPPLY CAMPS, TEMPORARY TOWNS SPRANG UP AND MOVED FORWARD WITH THE TRACKS."



"INDIANS SAW THE APPROACH OF THE IRON HORSE... WAR PARTIES GATHERED."



"SOMETIMES BUFFALO HERDS DELAYED THE TRAINS AND KNOCKED DOWN TELEGRAPH POLES!"



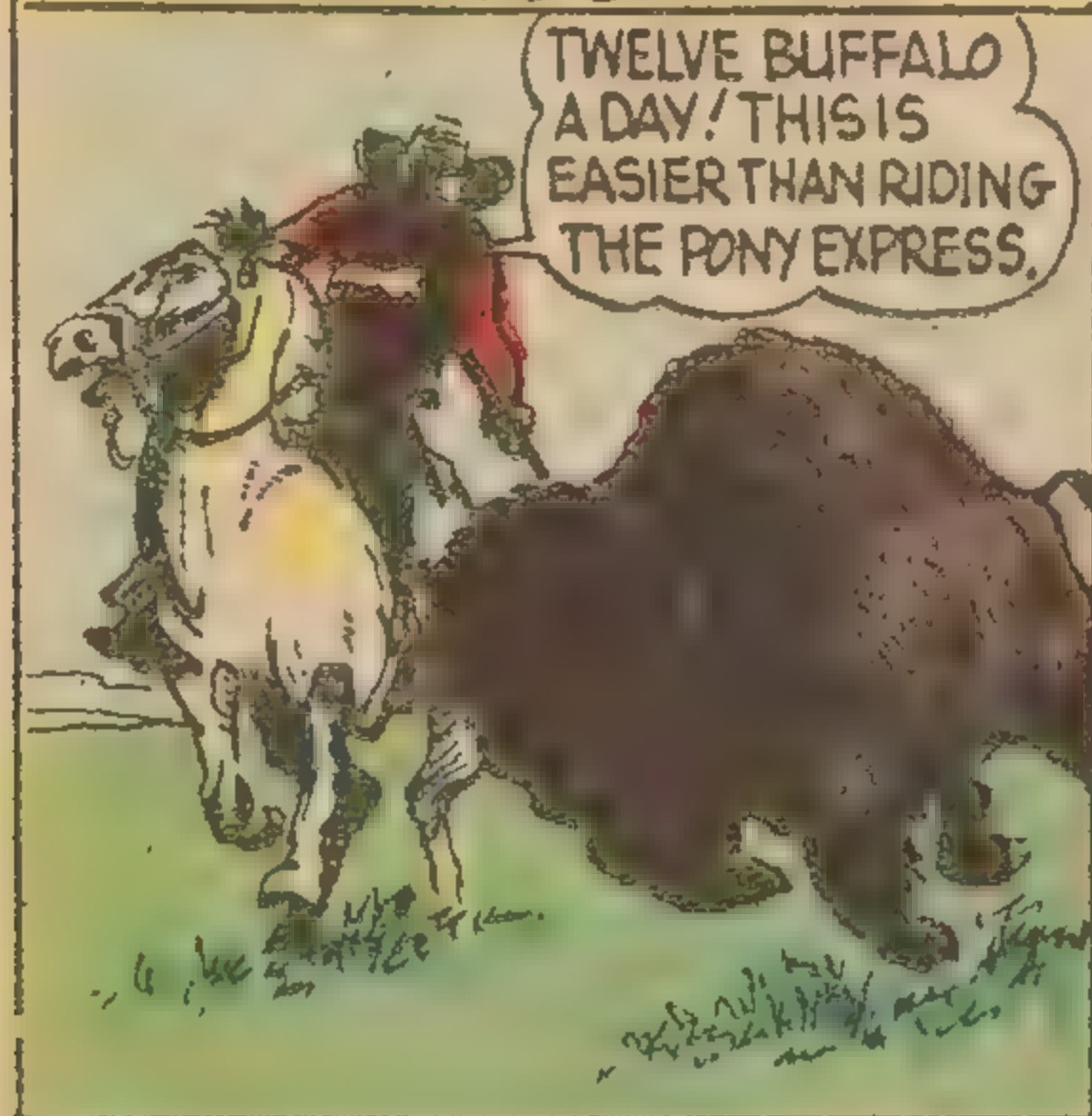


"MEANWHILE, ANOTHER RAILROAD, EMPLOYING THOUSANDS OF CHINESE WORKERS, TOILED EASTWARD THROUGH THE SIERRA MOUNTAINS. TRESTLES WERE BUILT ACROSS DEEP CANYONS, TUNNELS WERE DRILLED BY HAND. IT WAS A STRUGGLE AGAINST NATURE AND THE ELEMENTS."



"ON THE PLAINS THERE WAS A DIFFERENT KIND OF FIGHTING. INDIANS ATTACKED TRACK-LAYING GANGS IN AN EFFORT TO HALT THE MARCH OF THE IRON HORSE. BUT THE RAILS WENT DOWN MILE AFTER MILE AND, AS THE GAP BETWEEN THE TWO LINES NARROWED, TRACK-LAYING BECAME A GREAT RACE. EACH COMPANY TRIED TO OUT-DO THE OTHER IN MILES OF TRACK BUILT..."

"...AND BUFFALO, BILL EARNED HIS NICK-NAME BY SUPPLYING BUFFALO MEAT TO THE RAILROAD BUILDERS!"



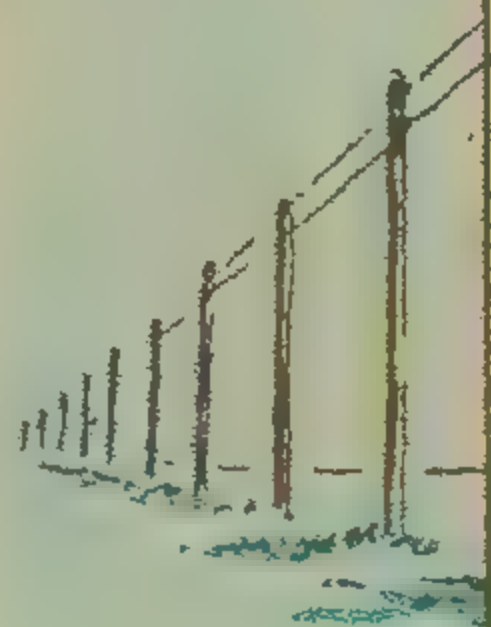
"TWELVE BUFFALO A DAY! THIS IS EASIER THAN RIDING THE PONY EXPRESS."

"THEN, ON MAY 10, 1869, THE TWIN RIBBONS OF STEEL WERE JOINED AT PROMONTORY, UTAH, IN THE FAMOUS **GOLDEN SPIKE CEREMONY**..."





...SIGNALLING THE COMPLETION OF THE FIRST RAILROUTE ACROSS THE CONTINENT. TELEGRAPH WIRES WERE CONNECTED WITH A BELL AT OUR NATION'S CAPITOL AND, AS THE SPIKE WAS DRIVEN, THE SOUND OF THE BLOWS ECHOED FROM COAST TO COAST. THE MESSAGE WAS FLASHED TO THE ASSOCIATED PRESS AND TO PRESIDENT GRANT, WHO MADE AN OFFICIAL ANNOUNCEMENT, WHILE ALLOVER THE COUNTRY WHISTLES WERE BLOWN, BELLS WERE RUNG, PARADES WERE FORMED, AND SPEECHES WERE MADE. THE ATLANTIC WAS NOW CONNECTED WITH THE PACIFIC BY RAIL, EAST UNITED WITH WEST, AND A VAST AND FERTILE REGION WAS OPENED FOR SETTLEMENT."



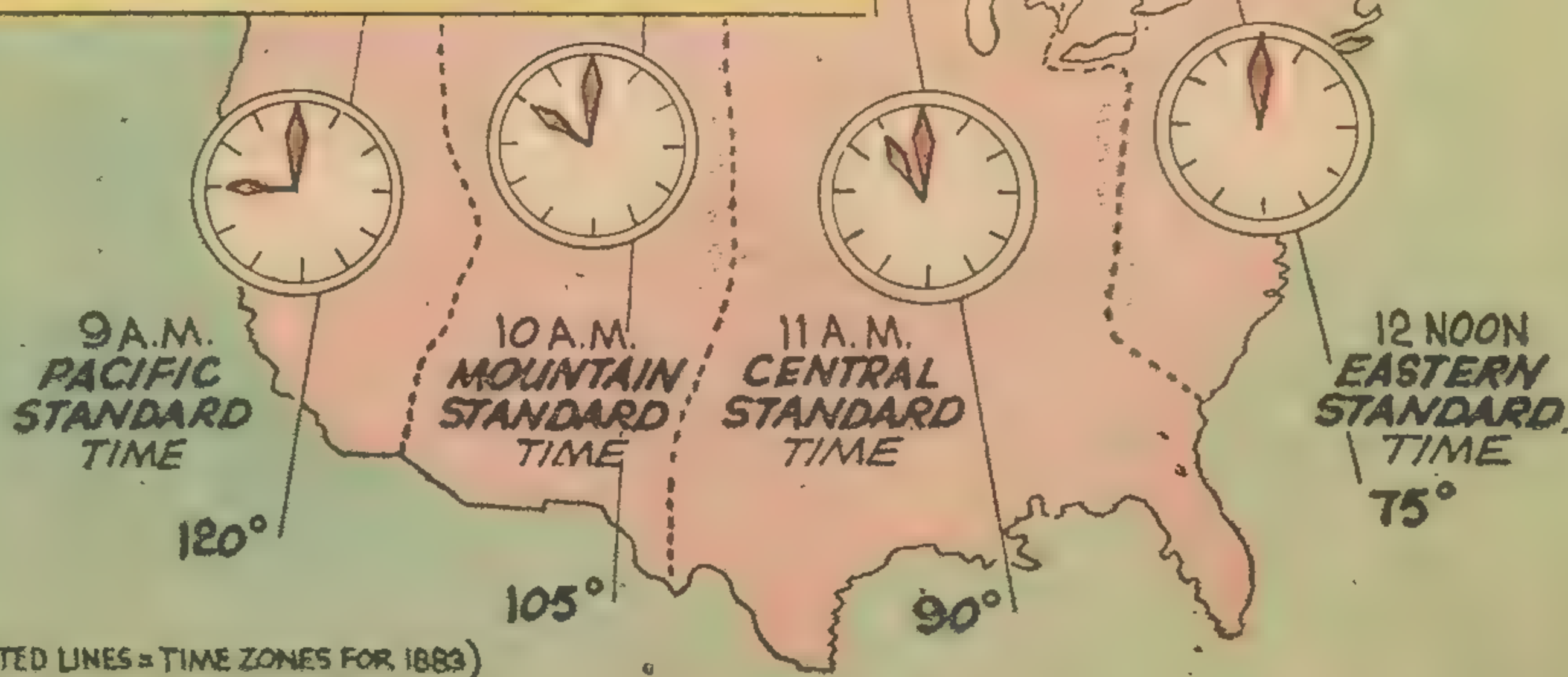
\*WHILE THE RAILS WERE REACHING ACROSS THE CONTINENT, THERE WERE OTHER DEVELOPMENTS, TOO. THE FIRST PULLMAN-BUILT DINING CAR WAS PLACED IN SERVICE (1868); GEORGE WESTINGHOUSE APPLIED FOR THE AIR BRAKE PATENT (1869); THE FIRST BRIDGE ACROSS THE MISSOURI RIVER WAS OPENED (1869); THE FIRST LOCOMOTIVE ENTERED INDIAN TERRITORY (NOW OKLAHOMA) (1870); THE FIRST NARROW GAUGE RAILROAD IN THE U.S. WAS OPENED OUT OF DENVER, COLORADO (1871); REFRIGERATOR CARS WERE USED FOR TRANSPORTATION OF FRESH FRUIT (1872).

IN 1873, THE FIRST THROUGH PASSENGER TRAIN BETWEEN CHICAGO AND NEW ORLEANS WAS OPERATED. IDAHO'S FIRST RAILROAD OPENED THE FOLLOWING YEAR...

... AND IN 1875, THE GREAT HOOSAC TUNNEL IN WESTERN MASSACHUSETTS WAS COMPLETED. THIS TUNNEL-- 4 3/4 MILES, IN LENGTH-- WAS THE LONGEST TUNNEL IN THE U.S. FOR 53 YEARS.

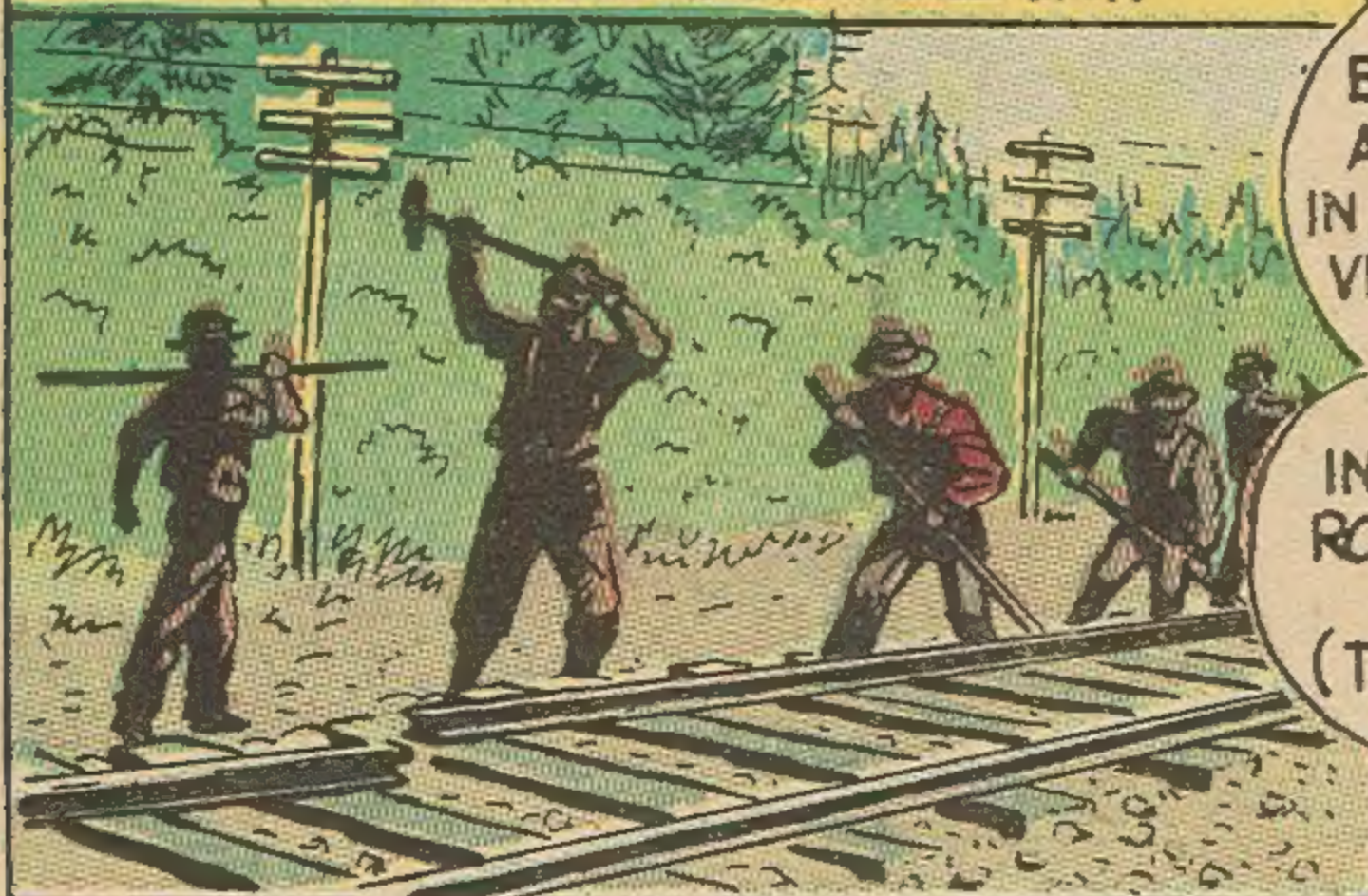


"AN IMPORTANT DATE TO REMEMBER IS NOVEMBER 18, 1883. ON THAT DATE, THE RAILROADS THROUGHOUT THE U.S. ADOPTED STANDARD TIME, DIVIDING THE NATION INTO FOUR TIME ZONES AND REPLACING THE CONFUSION OF LOCAL TIMES. 'RAILROAD TIME' WAS AT ONCE ACCEPTED BY THE NATIONAL GOVERNMENT AND BY CITIES AND TOWNS FROM COAST TO COAST WITHOUT ANY FEDERAL LAWS OF ANY KIND. IT WAS NOT UNTIL 35 YEARS LATER THAT CONGRESS PASSED THE STANDARD TIME ACT."





"ANOTHER GREAT STEP IN AMERICAN RAILROADING TOOK PLACE IN 1886. A COMPLETE CHANGE TO STANDARD GAUGE (DISTANCE BETWEEN RAILS) WAS MADE, ENABLING INTERCHANGE OF CARS THROUGHOUT THE U.S. ... ON ONE SOUTHERN ROAD ALONE, 1800 MILES OF TRACK WERE CHANGED IN A SINGLE DAY."

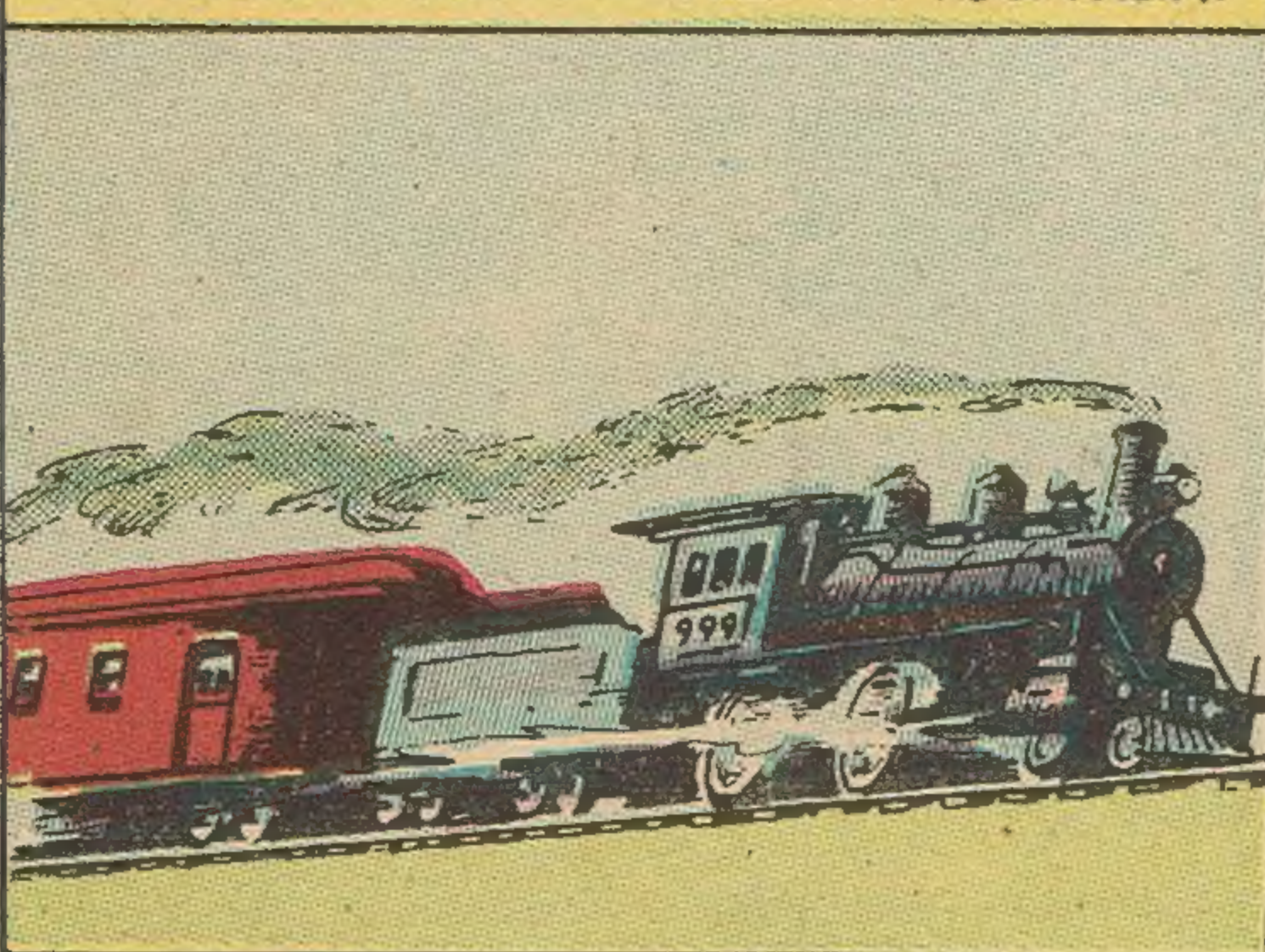


BOY? THE RAILROADS REALLY DO THINGS IN A BIG WAY. THEY BUILT UP THE COUNTRY, ALL RIGHT.

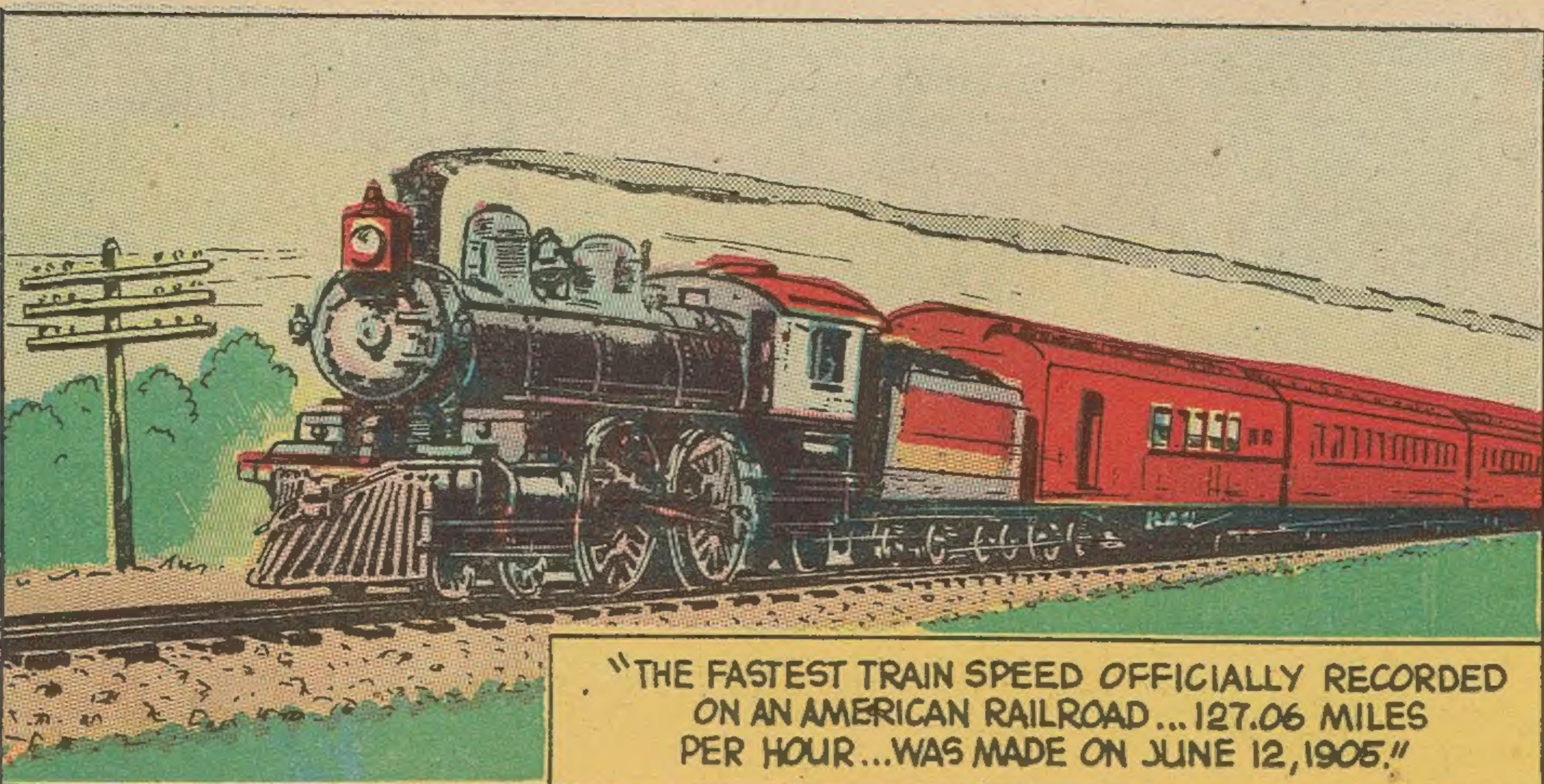
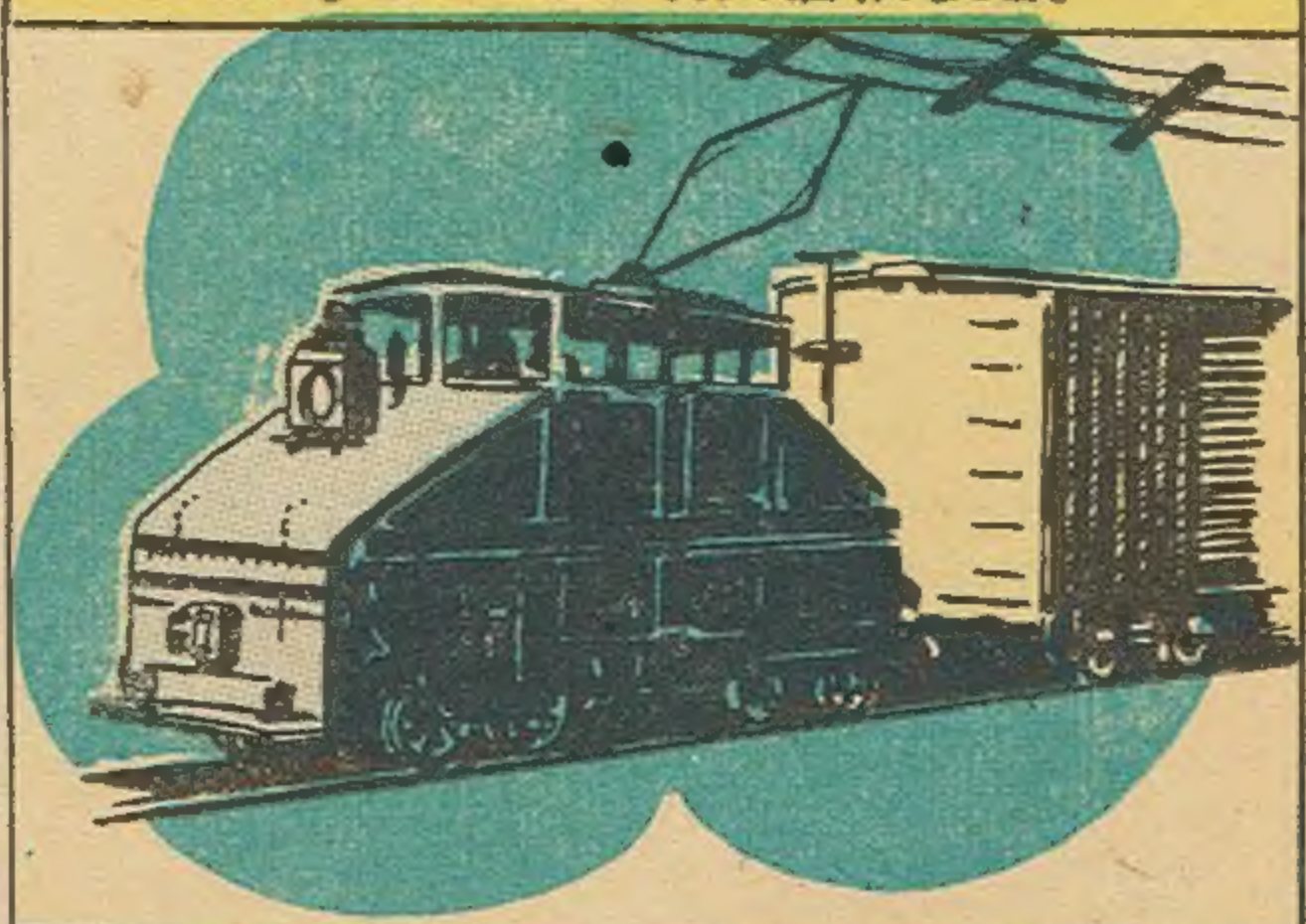
YES, IT WAS THE RAILROADS, WORKING TOGETHER, STANDARDIZING GAUGE AND EQUIPMENT, THAT GAVE US OUR BASIC TRANSPORTATION SYSTEM. HERE ARE A FEW THINGS THEY DID IN JUST ONE YEAR—1887... INSTALLED FIRST SOLID VESTIBULE, STANDARD AUTOMATIC COUPLER, TRIPLE VALVE AIR BRAKE, AND ELECTRIC LIGHTS. IN 1893, THE SECOND RAIL ROUTE TO THE NORTHWEST WAS COMPLETED. (THE FIRST WAS IN 1884).



"ON MAY 10, 1893, LOCOMOTIVE '999' MADE THE WORLD'S FIRST 100-MILE-AN-HOUR RUN."



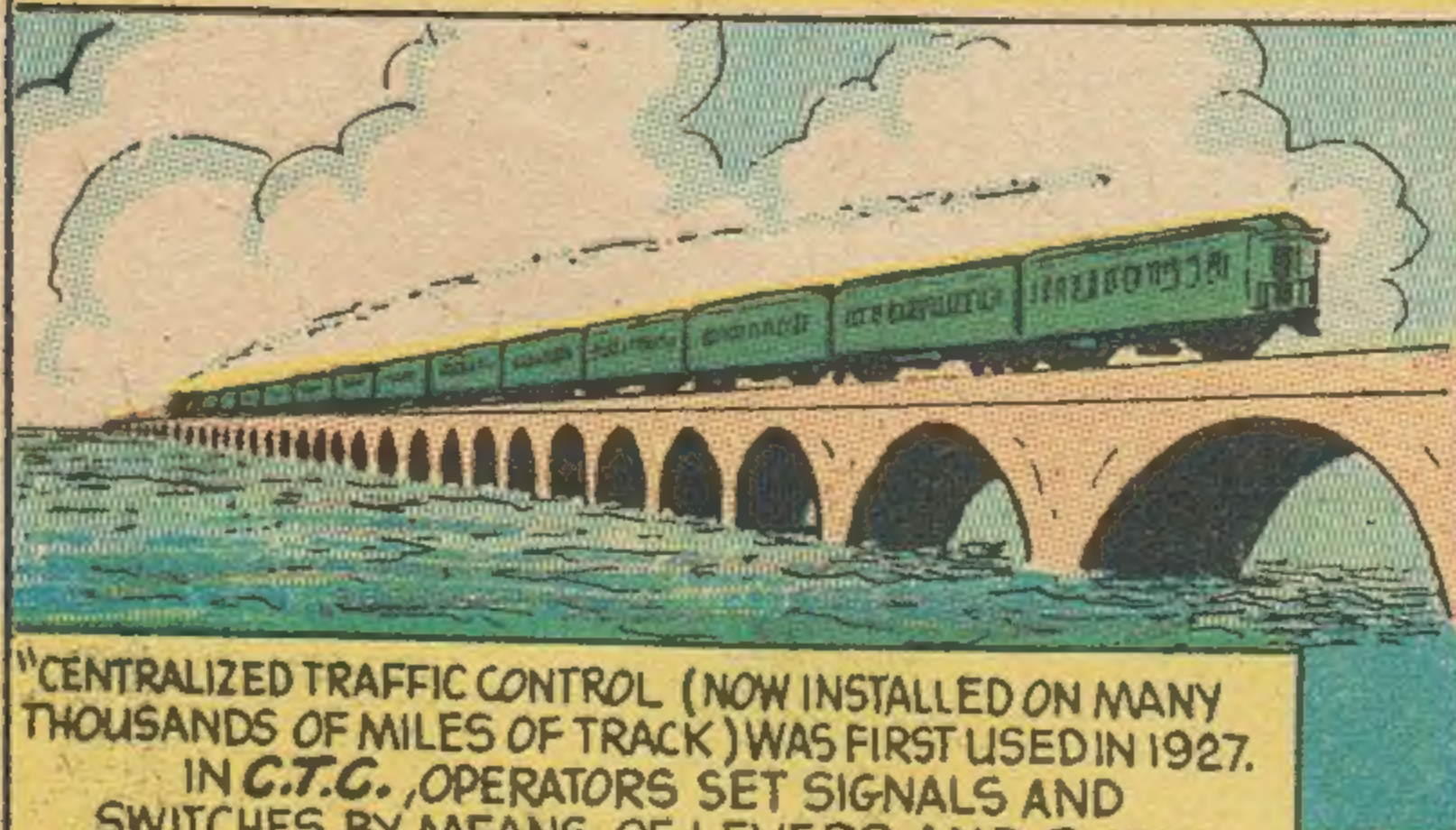
"THE FIRST ELECTRIC LOCOMOTIVE WENT TO WORK IN 1895... TWO YEARS BEFORE THE SPANISH-AMERICAN WAR. BY THIS TIME, MANY LARGER AND STRONGER STEAM ENGINES WERE IN USE."



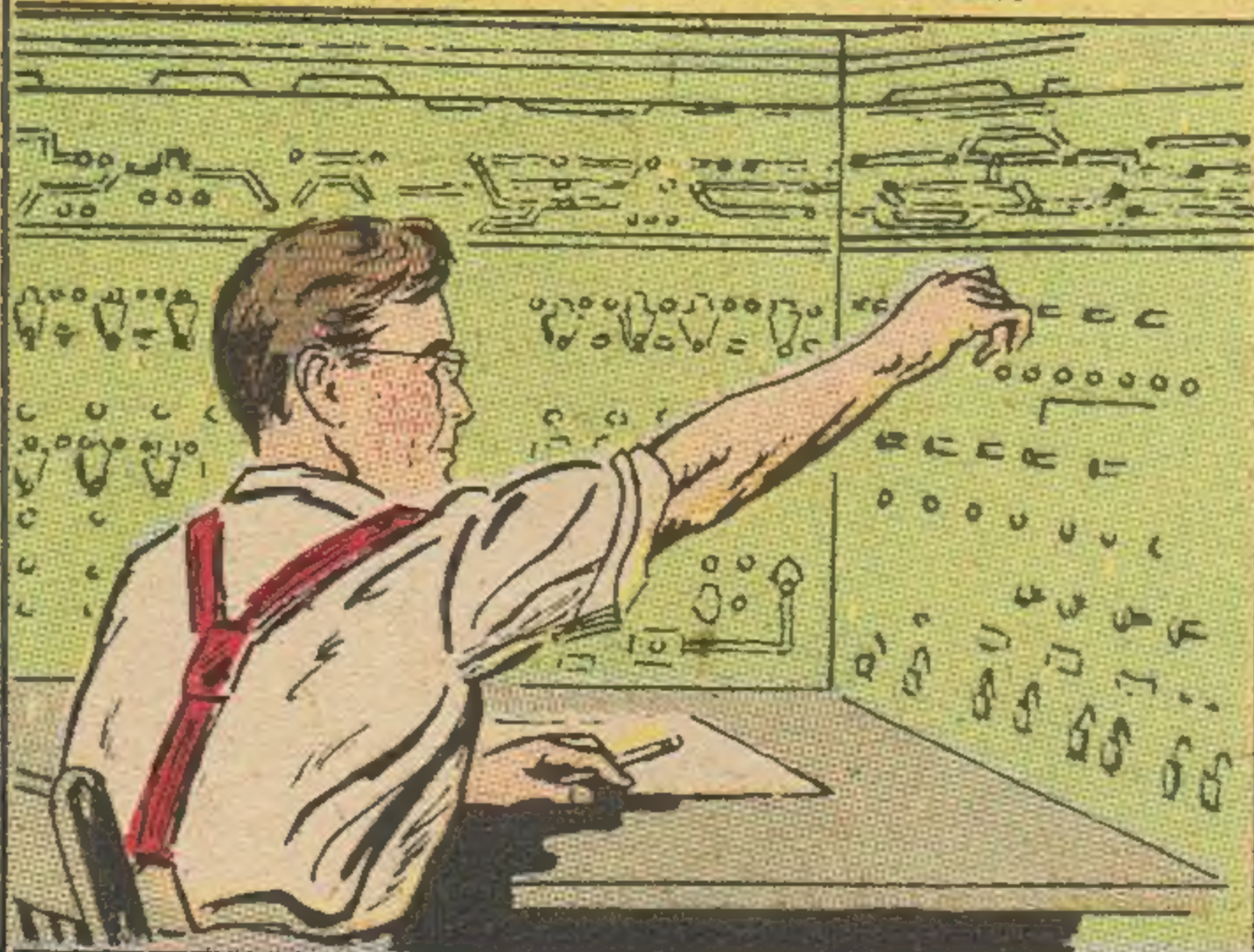
"THE FASTEST TRAIN SPEED OFFICIALLY RECORDED ON AN AMERICAN RAILROAD ... 127.06 MILES PER HOUR ... WAS MADE ON JUNE 12, 1905."



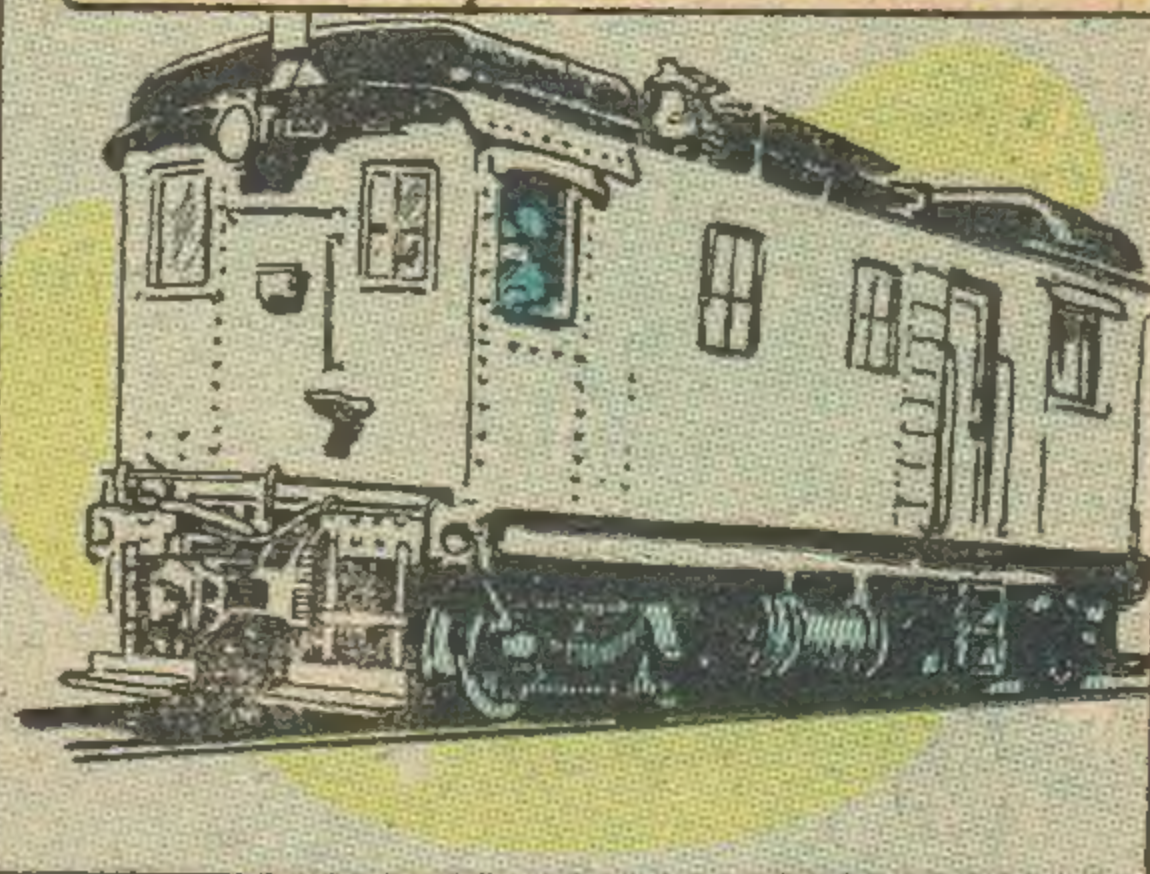
"IN 1912 ...TWO YEARS BEFORE THE FIRST WORLD WAR STARTED ... THE 'OVERSEAS RAILWAY' WAS COMPLETED FROM THE FLORIDA MAINLAND TO KEY WEST. TRAINS RAN OVER A LONG SERIES OF BRIDGES FROM ISLAND TO ISLAND, A GREAT FEAT OF ENGINEERING."



"CENTRALIZED TRAFFIC CONTROL (NOW INSTALLED ON MANY THOUSANDS OF MILES OF TRACK) WAS FIRST USED IN 1927. IN C.T.C., OPERATORS SET SIGNALS AND SWITCHES BY MEANS OF LEVERS AND PUSH BUTTONS ON A CONTROL PANEL."



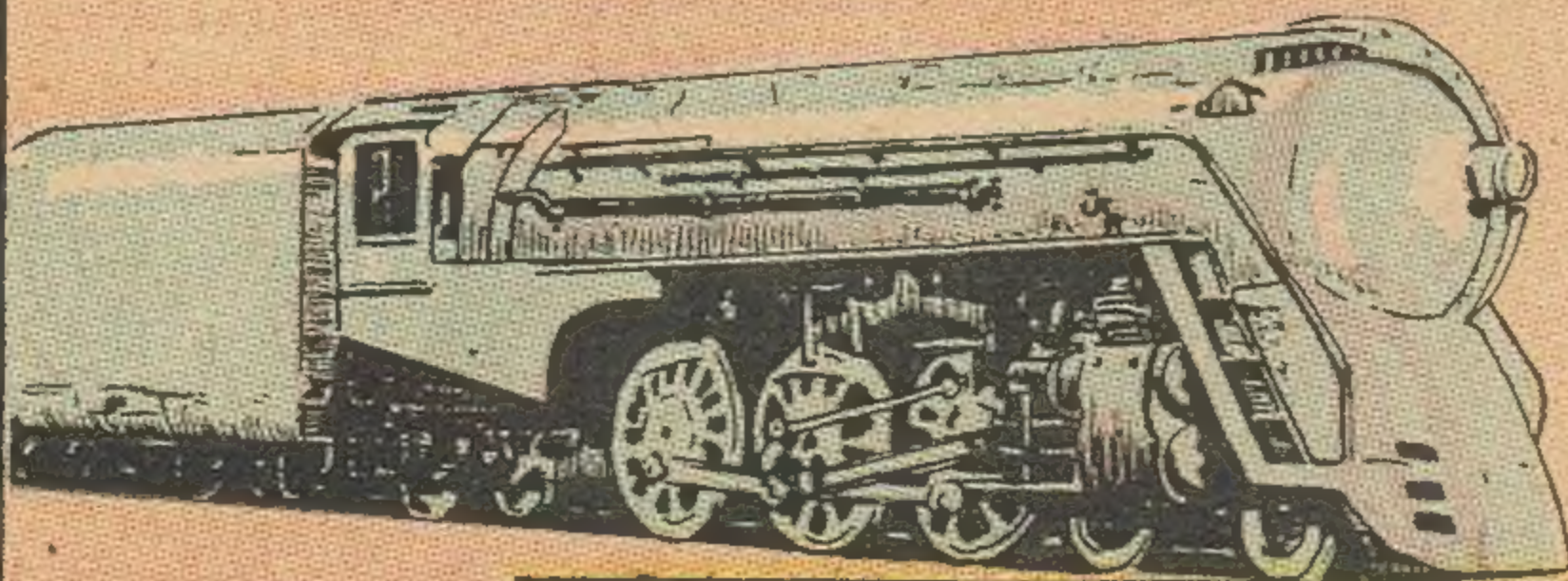
"DURING WORLD WAR I, THE GOVERNMENT TOOK OVER THE RAILROADS, BUT COULD NOT OPERATE THEM AS EFFICIENTLY AS PRIVATE MANAGEMENT. AFTER THE ROADS WERE TURNED BACK TO THEIR OWNERS, NEW DEVELOPMENTS CONTINUED. A NEW TYPE OF MOTIVE POWER APPEARED IN 1925... A DIESEL-ELECTRIC SWITCHING LOCOMOTIVE."



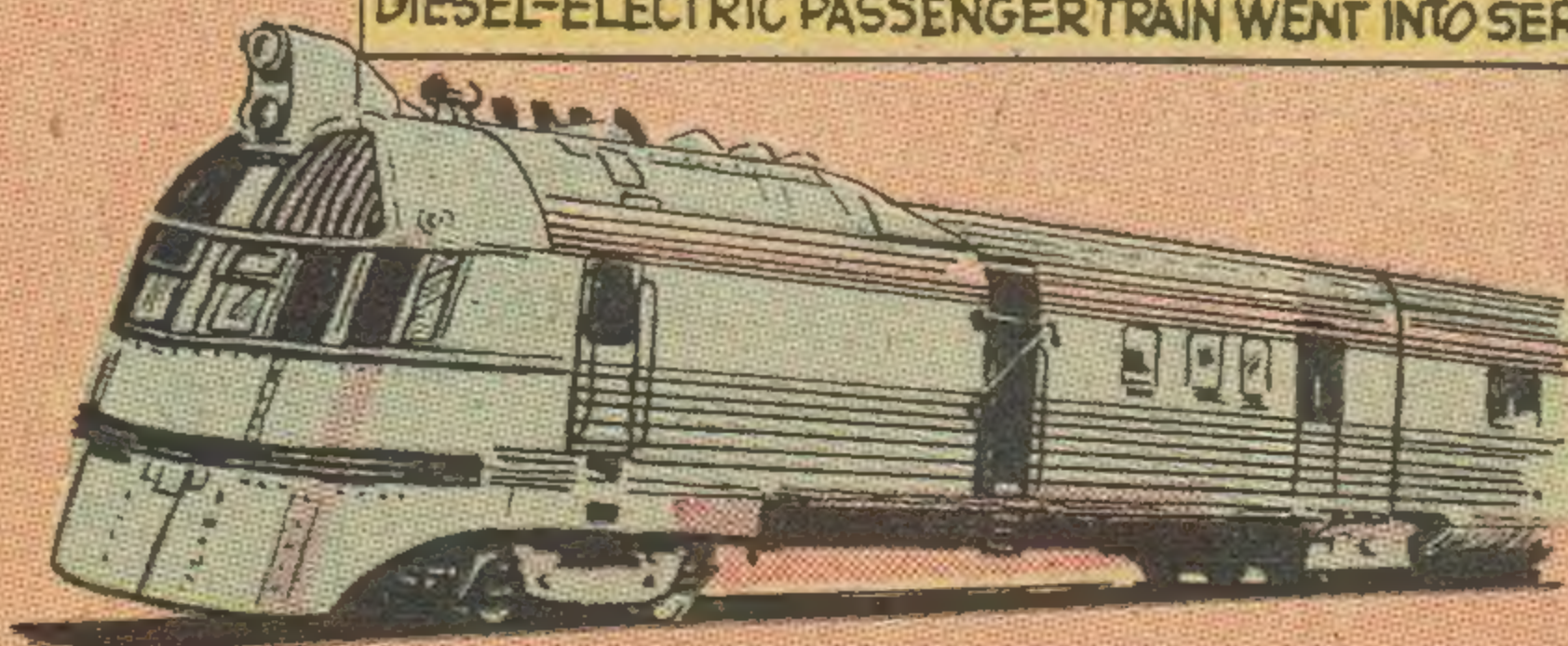
### HERE ARE MORE SIGNIFICANT DATES!

- 1927 FIRST TRAIN PASSED THROUGH MOFFAT TUNNEL, 6.2 MILES LONG, WEST OF DENVER... AIR CONDITIONING OF PASSENGER CARS.
  - 1928 RAILWAY EXPRESS AGENCY ORGANIZED TO HANDLE NATION-WIDE EXPRESS BUSINESS.
  - 1929 CASCADE TUNNEL, 7.79 MILES IN LENGTH, LONGEST IN THE WESTERN HEMISPHERE, OPENED IN WASHINGTON STATE.
  - 1935 ELECTRIC PASSENGER TRAIN SERVICE INTRODUCED BETWEEN NEW YORK AND WASHINGTON.
  - 1937 TWO-WAY TRAIN TELEPHONE COMMUNICATION SYSTEM INAUGURATED IN MAINLINE RAILROAD OPERATIONS.
- THE FIRST USE OF TELEPHONE COMMUNICATION FOR RAILROAD PURPOSES WAS BACK IN 1877.

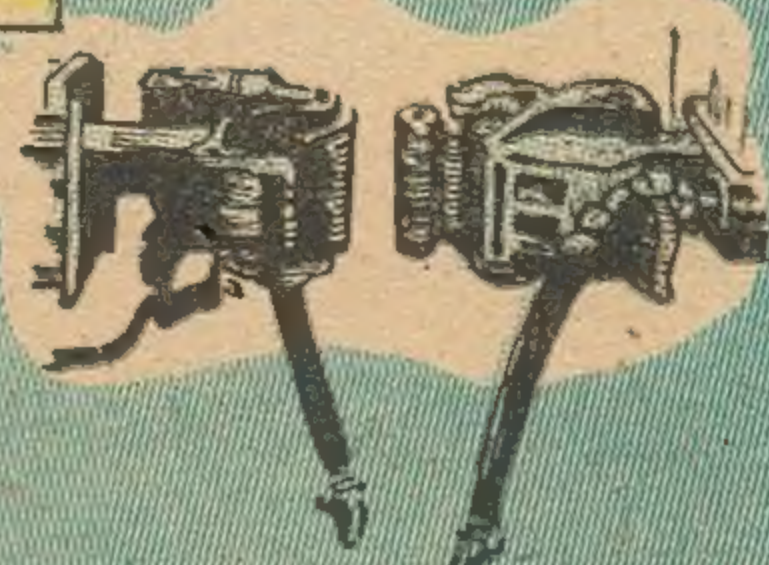
"IN THE 1930'S MANY STEAM LOCOMOTIVES AND TRAINS WERE STREAMLINED..."



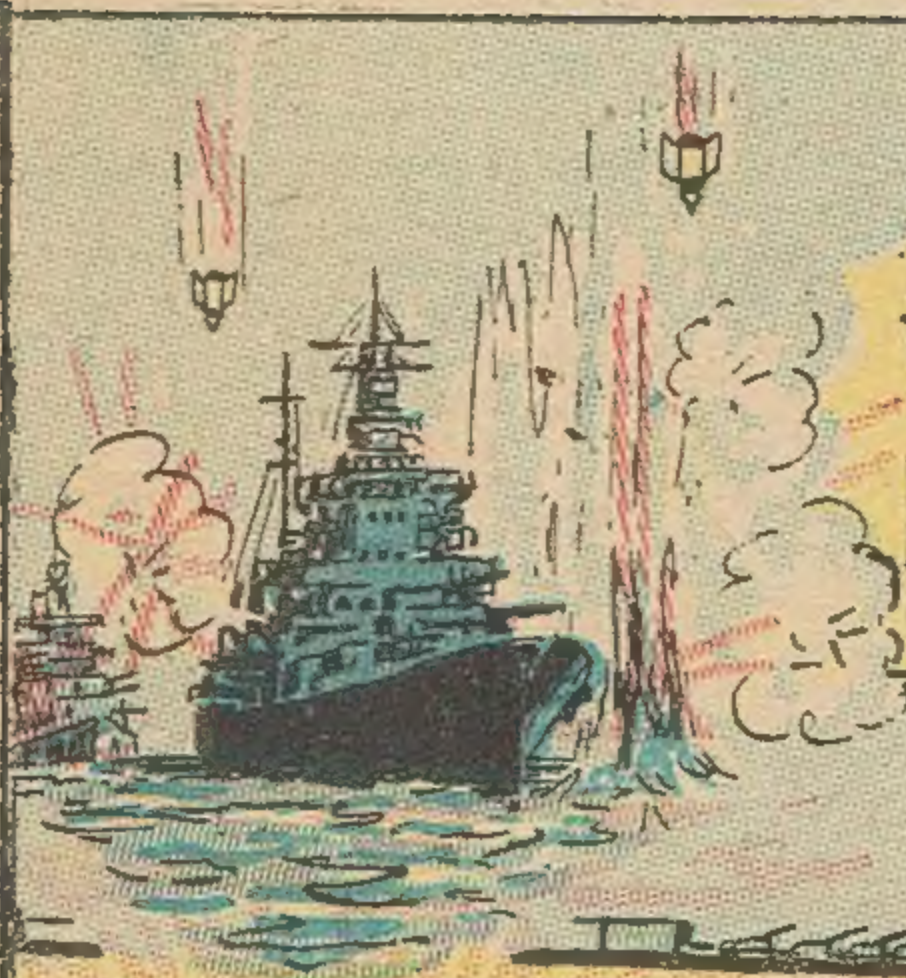
"...AND IN 1934 THE LIGHTWEIGHT STREAMLINED DIESEL-ELECTRIC PASSENGER TRAIN WENT INTO SERVICE."



"SINCE THE DAYS OF LINK AND PIN, COUPLERS HAVE BEEN KEPT INTERCHANGEABLE. AMONG THE MANY NEW IMPROVEMENTS INTRODUCED IN THE 1930'S WAS THE ANTI-TELESCOPING TIGHT-LOCK COUPLER."

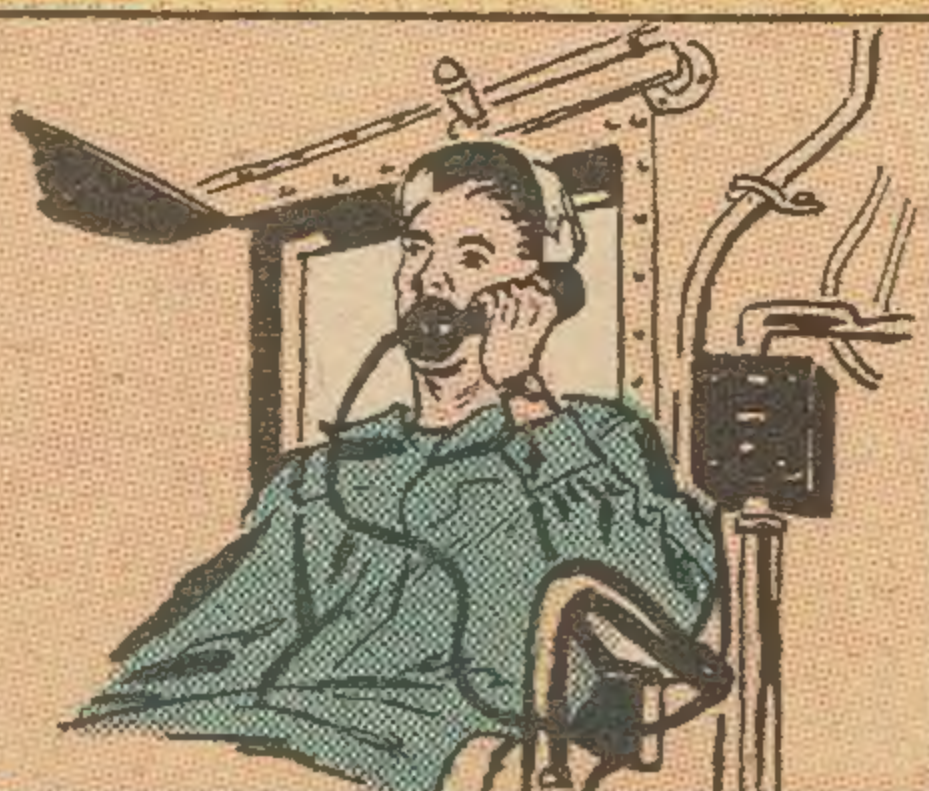






"AND THE RAILROADS REALLY SHOWED US WHAT THEY COULD DO. IN THIS WAR, UNLIKE WORLD WAR I, OUR RAILROADS UNDER THEIR OWN MANAGEMENT HAULED THE GREATEST VOLUME OF PASSENGER, FREIGHT, EXPRESS, AND MAIL IN THEIR HISTORY. TROOPS, GUNS, TANKS, MUNITIONS, AND SUPPLIES ROLLED OVER THE RAILS WITH SPEED, EFFICIENCY, AND ECONOMY... 737 BILLION TON-MILES OF FREIGHT IN 1944 ALONE. (A TON-MILE IS A TON OF FREIGHT CARRIED ONE MILE). EVEN WHILE HANDLING THIS HUGE JOB OF TRANSPORTATION, RAILROADS CONTINUED TO IMPROVE THEIR SERVICES."

## 1941 - PEARL HARBOR!



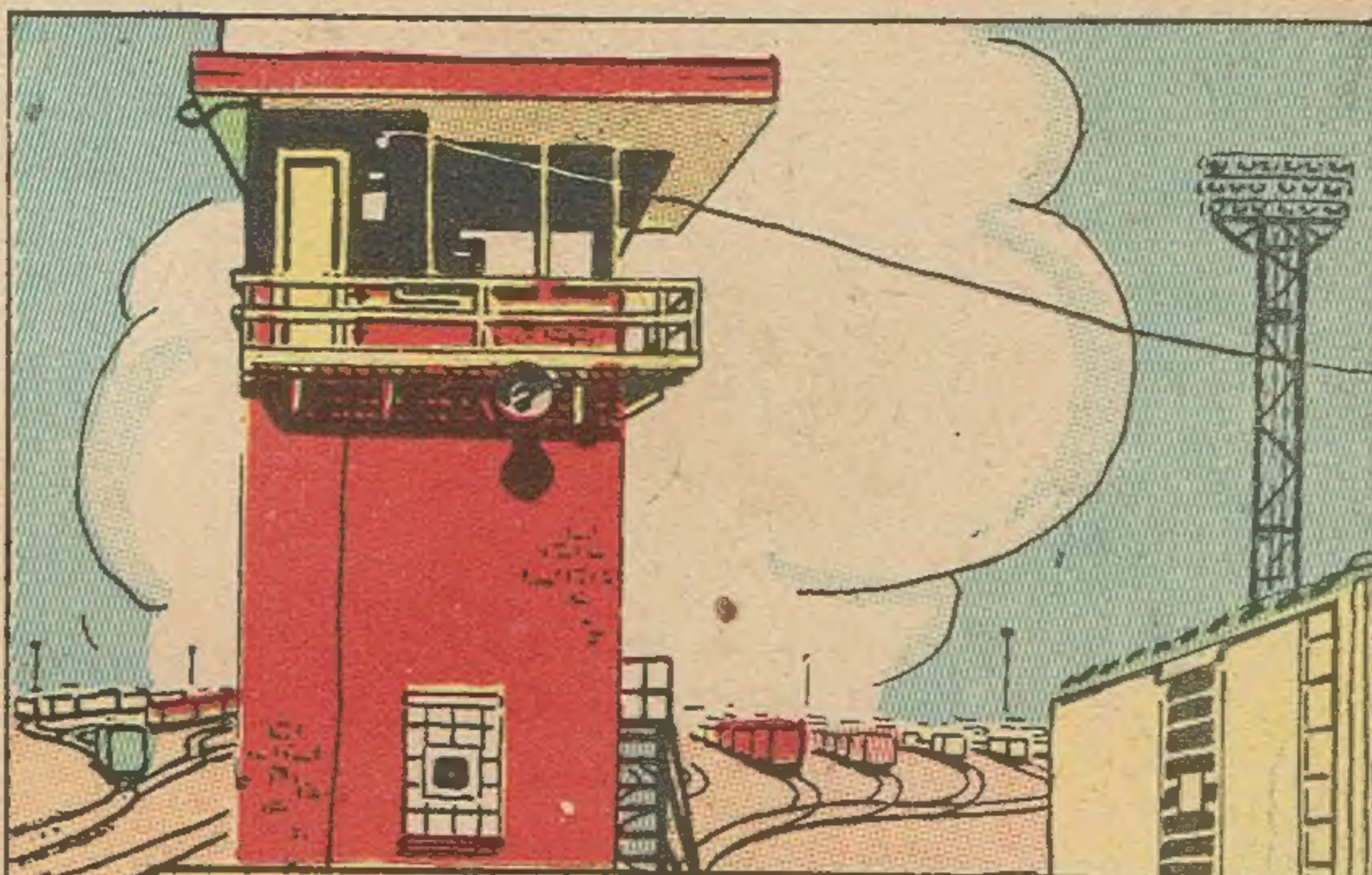
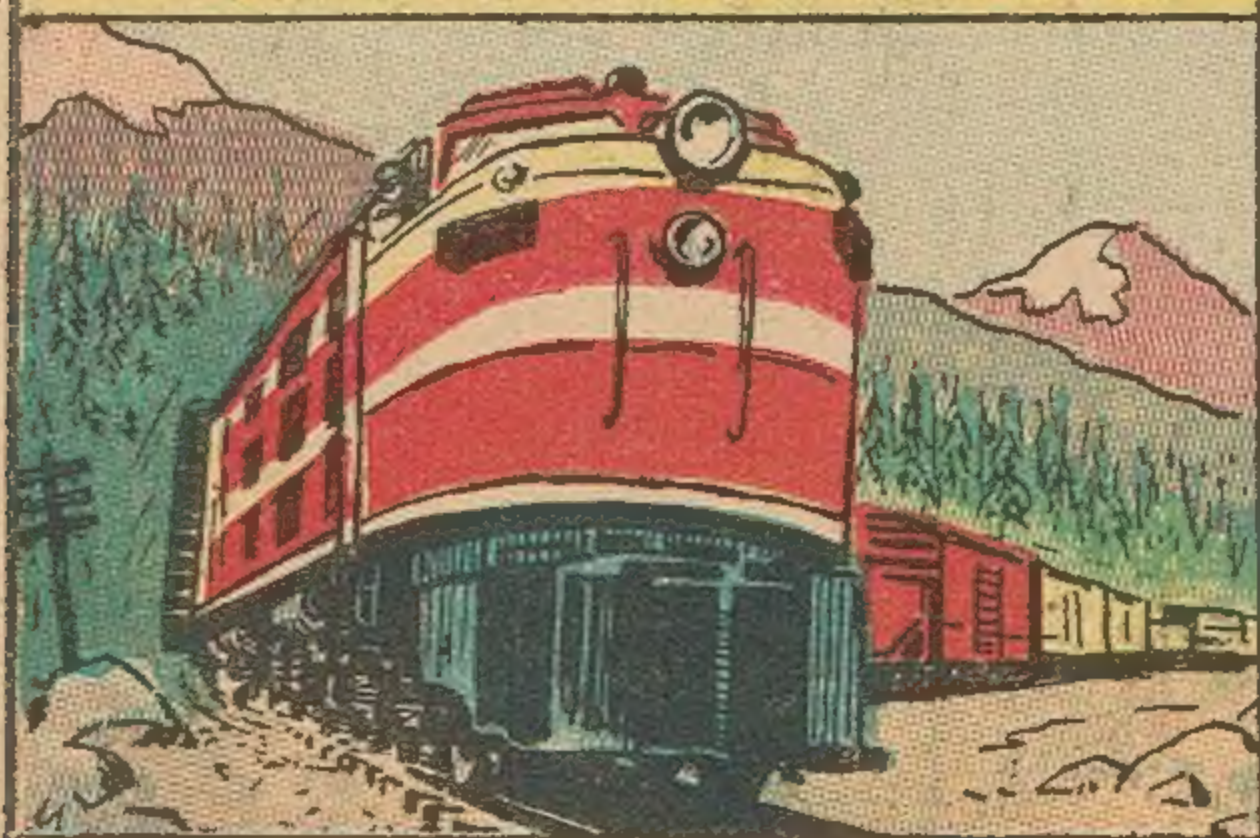
"RADIO CHANNELS FOR TRAIN OPERATION WERE ALLOCATED IN 1945..."



"...AND THE DOMED OBSERVATION CAR WAS INTRODUCED."



"...SUCH AS THE GAS TURBINE LOCOMOTIVE TO SPEED THE TRAINS OF TOMORROW."



"RAILROAD PROGRESS GOES ON. VAST YARDS ARE BEING BUILT, WITH ELECTRO-PNEUMATIC CAR RETARDERS AND LATEST TYPE SIGNALS AND COMMUNICATIONS. RAILROADS ARE BUYING NEW EQUIPMENT, AND DEVELOPING NEW ENGINES..."

WELL, JIMMIE, THAT'S THE STORY OF OUR RAILROADS. AND REMEMBER THIS, **THE FOOD, FUEL, GOODS AND SERVICES** TO KEEP OUR COUNTRY STRONG FLOW THROUGH **OUR RAILROADS.**

I'LL REMEMBER THAT, UNCLE SAM. AND THANKS FOR TELLING ME HOW YOU AND THE RAILROADS GREW UP TOGETHER. IT'S A GREAT STORY!







titansfan scan

Once Upon a Time...

for Cindy